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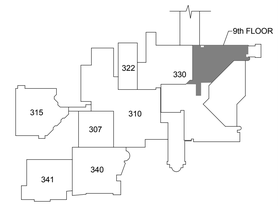
GENERAL SIGNAGE NOTES

A. Verify all conditions prior to fabrication, erection, and installation.
B. Install room identification signs on knob side of door and 2" over from door frame.
C. All tactile room number and room identification signs are required to meet ABA/ADA reqruirements for height and Braille text.
D. Building plan for evacuation map will be furnished by the project COR.
E. Sign text and copy is to be provided by the project COR.
F. See Specifications for sign types and details.
G. Provide finished backer on all signs that are installed on glass.
H. Refer to IF200-S series for signage details.

NINTH FLOOR SIGNAGE PLAN

Scale: 1/8" = 1'-0"

PROJECT



KEY PLAN

Scale: N.T.S.

1	Bid Set Drawings	05.16.2016
Revisions		*Date*

CONSULTANTS:

STATE OF OHIO
JOHN A. POE 6549
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Drawing Title: NINTH FLOOR SIGNAGE PLAN

Approved: Project Director

Project Title: RELOCATE PROSTHETICS AND PODIATRY CLINICS

Location: Dayton, Ohio

Date: 05.16.2016 | Reviewed: Approver | Drawn: Designer

Project No. VA Project No. 552-15-502 JPA Project No. 14006.00

Building Number: 330

Drawing Number: 330IF109-S

Dwg. of XX

Office of Construction and Facilities Management

Department of Veterans Affairs

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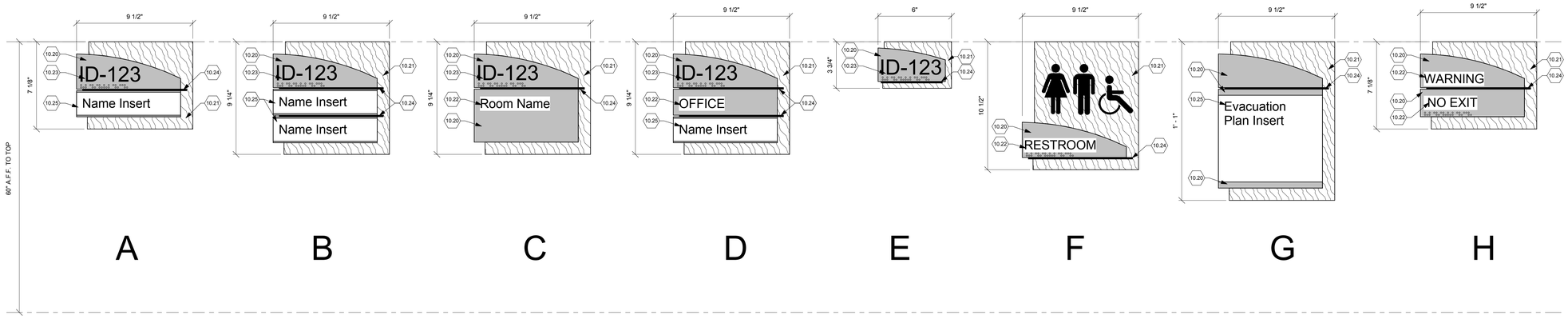
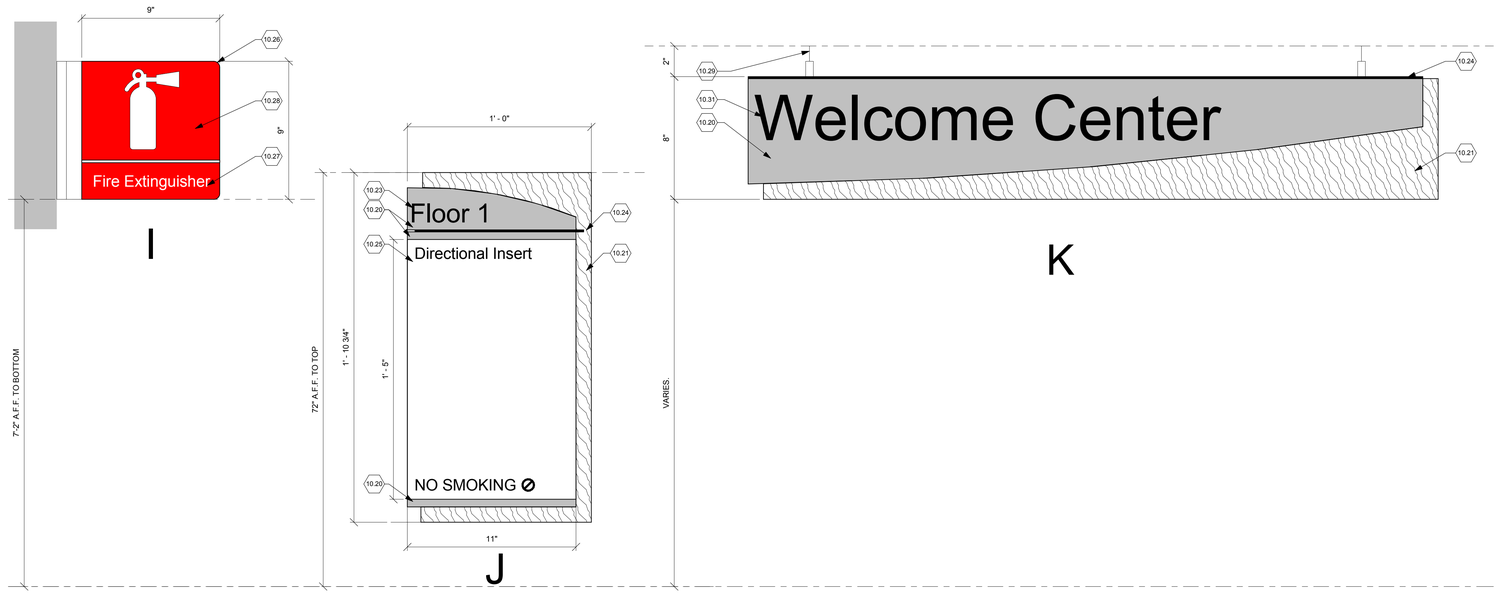
GENERAL SIGNAGE NOTES

A. Verify all conditions prior to fabrication, erection, and installation.
B. Install room identification signs on knob side of door and 2" over from door frame.
C. All tactile room number and room identification signs are required to meet ABA/ADA reqruirements for height and Braille text.
D. Building plan for evacuation map will be furnished by the project COR.
E. Sign text and copy is to be provided by the project COR.
F. See Specifications for sign types and details.
G. Provide finished backer on all signs that are installed on glass.
H. Refer to IF200-S series for signage details.

⎔ SIGNAGE NOTES

10.20 Plastic laminate face material.
10.21 Acrylic resin backer material.
10.22 3/4" helvetica bold raised text.
10.23 1 1/4" helvetica bold raised text.
10.24 Metal accent bar.
10.25 Paper insert.
10.26 3/8" radius corners.
10.27 Fire red B/G white arial copy and graphic.
10.28 Red plastic face.
10.29 Cable wires mounting system.
10.31 3" helvetica bold raised text.





Signage Details

Scale: N.T.S.

Revisions		Date
1	Bid Set Drawings	05.16.2016

CONSULTANTS:

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Drawing Title: NINTH FLOOR SIGNAGE DETAILS
Approved: Project Director

Project Title: RELOCATE PROSTHETICS AND PODIATRY CLINICS
Location: Dayton, Ohio
Date: 05.16.2016 | Checked: Approver | Drawn: Designer

Project No.
VA Project No. 552-15-502
JPA Project No. 14006.00
Building Number: 330
Drawing Number: 330IF209-S
Dwg. of xx

Office of Construction and Facilities Management
Department of Veterans Affairs

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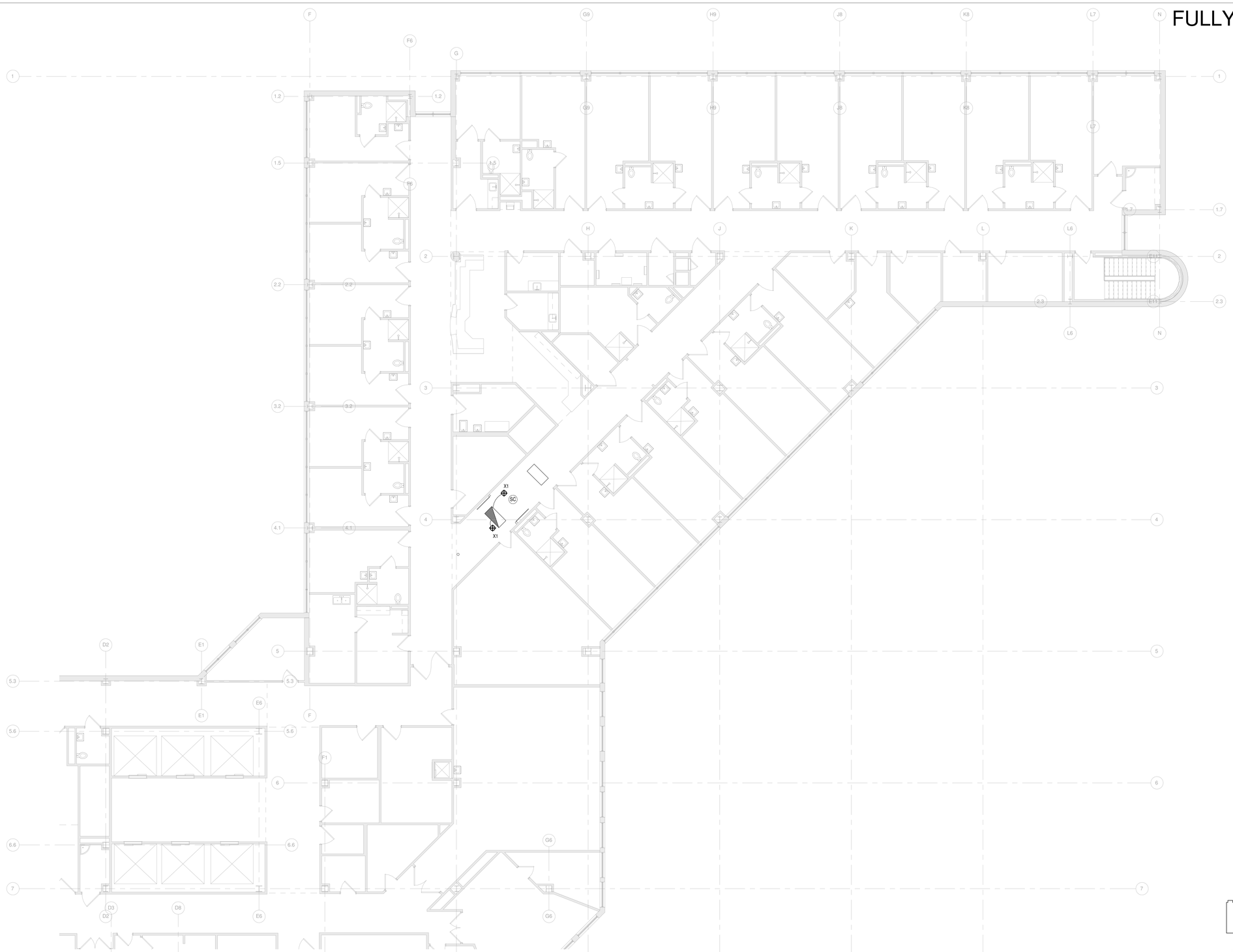
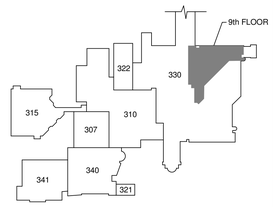


N
PROJECT

330-NINTH FLOOR - LIGHTING

Scale: 1/8" = 1'-0"



KEY PLAN

Scale: N.T.S.

Revisions	Date

CONSULTANTS:

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Heapy Project No.: 2014-04034 Firm License No.: 01528

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Drawing Title
NINTH FLOOR PLAN - LIGHTING

Approved: Project Director

Project Title
RELOCATE PROSTHETICS AND PODIATRY CLINICS

Location
Dayton, Ohio

Date 05.16.2016 | Checked MSG | Drawn JB

Project No.
VA Project No. 552-15-502
JPA Project No. 14006.00

Building Number
330

Drawing Number
330EL109

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Office of Construction and Facilities Management
Department of Veterans Affairs

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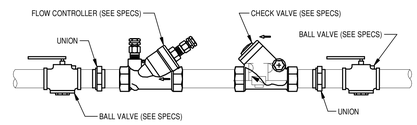
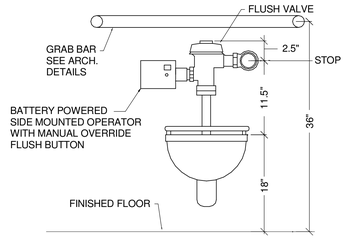
one-eighth inch = one foot
one-quarter inch = one foot
three-eighths inch = one foot
one-half inch = one foot
three-quarters inch = one foot
one inch = one foot
one and one-half inches = one foot
three inches = one foot

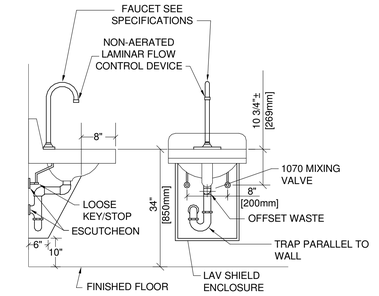
FULLY SPRINKLERED



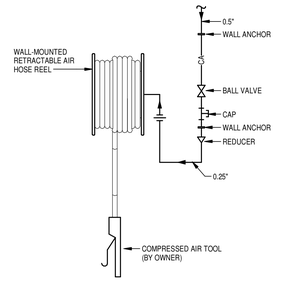
4 **FLOW CONTROLLER ASSEMBLY**
SCALE: 1/8" = 1'-0"



1 **P103 WATER CLOSET**
SCALE: 12" = 1'-0"



2 **P418 WALL HUNG LAVATORY**
SCALE: 12" = 1'-0"



3 **RETRACTABLE AIR HOSE REEL - M1**
SCALE: 1/8" = 1'-0"

Revisions		Date
1	35% Schematic Design	03.05.2015
2	65% Design Development	04.28.2015
3	95% Owner Review	08.14.2015
4	100% Construction Documents	11.04.2015
5	Bid Set Drawings	01.15.2016

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Heapy Project No.: 2014-04034 Firm License No.: 01528

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ARCHITECT/ENGINEERS:
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Drawing Title: DETAILS

Approved: Project Director

Project Title: RELOCATE PROSTHETICS AND PODIATRY CLINICS

Location: Dayton, Ohio

Date: 05.16.2016 | Checked: CSS | Drawn: DPB

Project No. VA Project No. 552-15-502 JPA Project No. 14006.00

Building Number: 999

Drawing Number: P501

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Department of Veterans Affairs

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FIXTURE SCHEDULE

SYMBOL	MOUNTING HEIGHT	DESCRIPTION	FLOW		FIXTURE UNITS			SUPPLY			WASTE & VENT				REMARKS
			GPM	GPF	DRAINS	WATER COLD	WATER HOT	COLD	HOT	TEPID	OUTLET	VENT	DIRECT	INDIRECT	
P103	NOTE 1	WATER CLOSET/ WALL HUNG/ ELONGATED BOWL/ ADA		1.28	4	5		1"			4"	2"	•		BATTERY POWERED/ SENSOR OPERATED
P201	NOTE 1	URINAL/ WALL HUNG/ ADA		.5	4	4	0	0.75"			2"	1.5"	•		BATTERY POWERED/ SENSOR OPERATED
P418	34" TO RIM	LAVATORY/ WALL HUNG/ 20"x18"/ ADA/ NON-AERATED FLOW	0.5		1	0.6	0.6	0.5"	0.5"		1.5"	1.5"	•		SENSOR OPERATED/ GOOSENECK SPOUT/ LAV SHIELD
P419	C'TOP SOLID SURFACE	LAVATORY/ BY G.C./ ADA/ NON-AERATED FLOW	0.5		1	0.6	0.6	0.5"	0.5"		1.25"	1.5"	•		SENSOR OPERATED/ GOOSENECK SPOUT/ ADA COVERS
P420	'	LAVATORY / SOLID SURFACE BY G.C. / ADA			1	1.5	1.5	0.5"	0.5"		1.25"	1.5"	•		LAVATORY AND FAUCET PROVIDED BY G.C.
P502	FLOOR SET	MOP SINK/ 24"x24"x12"/ 6" DROP FRONT TERRAZZO			3	2.25	2.25	0.5"	0.5"		3"	1.5"	•		PAIL HOOK FAUCET/ VACUUM BREAKER/ CROSS HANDLES
P505	30" TO RIM	CLINIC SERVICE SINK / WALL HUNG / BEDPAN WASHER			3	5	2.25	1"	0.5"		4"	2"			ELBOW BLADE HANDLES/ FOOT CONTROL/ RIM GUARD
P525	C'TOP	SINK/ SS/ SINGLE COMP'T	1.5		1	0.5	0.5	0.5"	0.5"		1.5"	1.5"	•		GOOSENECK SPOUT
P528	C'TOP	SINK/ SS/ SINGLE COMP'T	1.5		2	3	3	0.5"	0.5"		1.5"	1.5"	•		GOOSENECK SPOUT
P608	36" TO SPOUT	WATER COOLER/ DRINKING FOUNTAIN/ ADA			0.5	0.5	0	0.5"			1.25"	1.5"	•		WALL MOUNTED
P609	36" TO LOW SPOUT	WATER COOLER/ DRINKING FOUNTIN/ DUAL HEIGHT/ ADA			0.5	0.5	0	0.5"			1.5"	1.5"	•		WALL MOUNTED
P701	44" TO VALVE	SHOWER UNIT/ VALVE AND HEAD ASSEMBLY/ ADA	1.85		2	1.5	1.5	0.5"	0.5"		2"	1.5"	•		
P706	NOTE 2	EMERGENCY SHOWER/ EYE/ FACE WASH/ FREE-STANDING			1	6	6			1.25"	1.5"	1.5"	•		EMERGENCY EQUIP./ TEPID WATER TO FIXTURE
P811	48" TO CL	WATER SUPPLY BOX			0	0.5	0	0.75"							PROVIDE FLEXIBLE CONNECTOR TO EQUIPMENT

PLUMBING FIXTURE NOTES:
1. REFER TO ARCHITECTURAL ELEVATIONS AND SPECIFICATION SECTION 22 40 00 FOR MOUNTING HEIGHTS.
2. REFER TO SPECIFICATIONS.

DRAIN SCHEDULE

SYMBOL	DESCRIPTION	BODY				STRAINER / GRATE						TOP FINISH			
		C.I.	S.S.	C.R.	BRASS	RD.	SQ.	ADJUST.	FLAT	RECESS	DOME	NICKLE BRONZE	C.I.	C.R.	S.S.
FD2	3" MEDIUM DUTY/ DOUBLE DRAINAGE/ VANDAL RESISTANT/ (TYPE C) TRAP PRIMER CONNECTION			•					•					•	

LAB EQUIPMENT

GENERAL NOTES:
A. PROVIDE ROUGH-IN.
B. INSTALL ALL "LOOSE" COMPONENTS.
C. PROVIDE ALL NECESSARY SUPPLIES, STOPS, TRAPS, FIX. DRAINS, CONTINUOUS WASTE, & ALL INDIRECT WASTE.
D. MAKE ALL FINAL CONNECTIONS TO EXISTING/RELOCATED EQUIPMENT. FINAL CONNECTIONS TO NEW EQUIPMENT SHALL BE BY THE EQUIPMENT SUPPLIER.
E. SUPPLIES SHALL BE AS LISTED. TERMINAL OUTLETS ON EQUIPMENT MAY BE SMALLER AND REDUCER FITTING REQUIRED.

NOTES:
1. REFER TO FLOOR PLAN FOR INFORMATION REGARDING NATURAL GAS, LAB AIR, AND LAB VACUUM CONNECTIONS AT L1 LOCATIONS.

MARK	DESCRIPTION	SUPPLY									WASTE & VENT						WASTE SYS.		
		C.W.	H.W.	MEDICAL AIR	MEDICAL VACUUM	OXYGEN	NITROUS OXIDE	CARBON DIOXIDE	NATURAL GAS	GAS EVACUATION	PURE WATER (DEFINE CLASS)	FIX. OUTLET	TRAP	FIX. DRAIN	WASTE MIN.	VENT MIN.	INDIRECT	AIRGAP	AIRBREAK	SANITARY	LAB WASTE	SEE NOTE
L1		0.5"	0.5"									1.5"	1.5"	1.5"	1.5"	1.5"					•	#1

Revisions		Date
1	35% Schematic Design	03.05.2015
2	65% Design Development	04.28.2015
3	95% Owner Review	08.14.2015
4	100% Construction Documents	11.04.2015
5	Bid Set Drawings	01.15.2016

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CONSULTANTS:

Heapy Engineering
MEP Design Technology Planning Commissioning Energy
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Heapy Project No.: 2014-04034 Firm License No.: 01528

STATE OF OHIO
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Drawing Title: SCHEDULES

Approved: Project Director

Project Title: RELOCATE PROSTHETICS AND PODIATRY CLINICS

Location: Dayton, Ohio

Date: 05.16.2016 | Checked: CSS | Drawn: DPB

Project No.
VA Project No. 552-15-502
JPA Project No. 14006.00

Building Number: 999

Drawing Number: P601
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Department of Veterans Affairs

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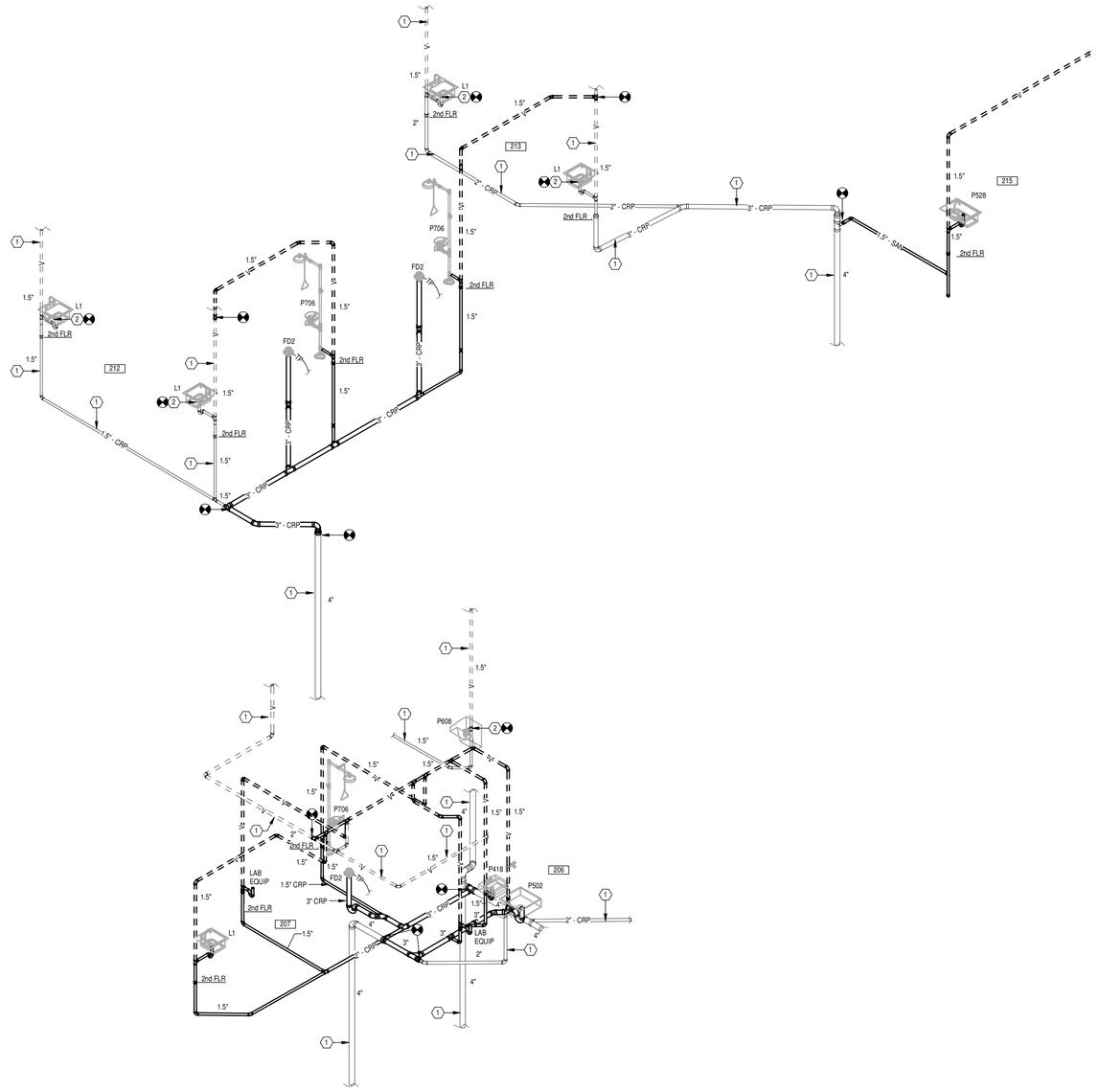
GENERAL NOTES

A REFER TO SHEET P001 FOR LEGEND, SYMBOLS & INDEX OF DRAWINGS.

PLAN NOTES

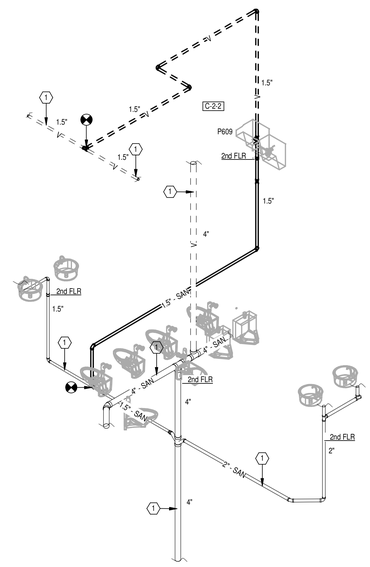
1 EXISTING TO REMAIN.

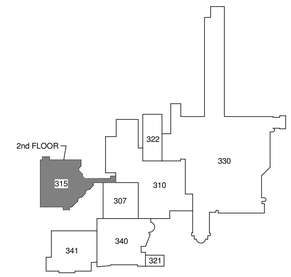
2 MODIFY EXISTING SANITARY WASTE AND VENT PIPING TO ACCOMMODATE REPLACEMENT OF LAB SINK.



BUILDING 315 SOIL, WASTE & VENT

Scale: N.T.S.





KEY PLAN

Scale: N.T.S.

1	35% Schematic Design	03.05.2015
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Revisions		*Date*

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Drawing Title: SOIL, WASTE & VENT

Approved: Project Director

Project Title: RELOCATE PROSTHETICS AND PODIATRY CLINICS

Location: Dayton, Ohio

Date: 05.16.2016 | Checked: CSS | Drawn: DPB

Project No. VA Project No. 552-15-502 JPA Project No. 14006.00

Building Number: 999

Drawing Number: P901

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Department of Veterans Affairs

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one inch = one foot | three-quarters inch = one foot | one-half inch = one foot | three-eighths inch = one foot | one-quarter inch = one foot | one-eighth inch = one foot | three inches = one foot | one and one-half inches = one foot

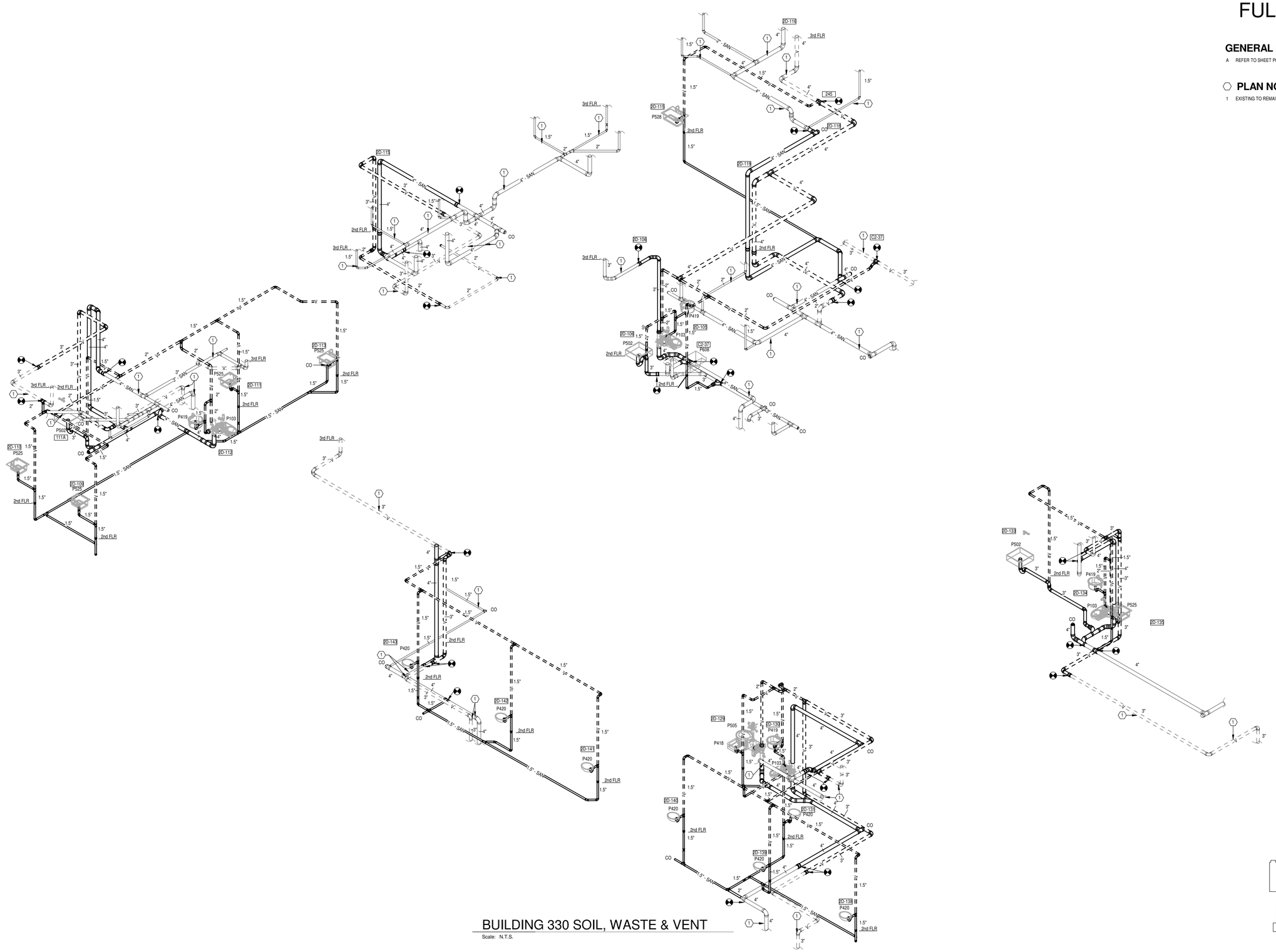
FULLY SPRINKLERED

GENERAL NOTES

A REFER TO SHEET P001 FOR LEGEND, SYMBOLS & INDEX OF DRAWINGS.

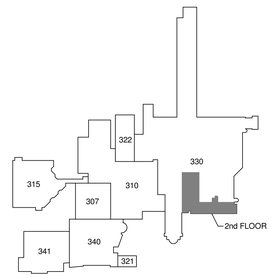
PLAN NOTES

1 EXISTING TO REMAIN.



BUILDING 330 SOIL, WASTE & VENT

Scale: N.T.S.



KEY PLAN

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5	Bid Set Drawings	01.15.2016
Revisions		*Date*

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ARCHITECT/ENGINEERS:

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Drawing Title: SOIL, WASTE & VENT

Approved: Project Director

Project Title: RELOCATE PROSTHETICS AND PODIATRY CLINICS

Location: Dayton, Ohio

Date: 05.16.2016 | Checked: CSS | Drawn: DPB

Project No. VA Project No. 552-15-502 JPA Project No. 14006.00

Building Number: 999

Drawing Number: P902

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Office of Construction and Facilities Management

Department of Veterans Affairs

one-eighth inch = one foot | one-quarter inch = one foot | three-eighths inch = one foot | one-half inch = one foot | three-quarters inch = one foot | one inch = one foot | one and one-half inches = one foot | three inches = one foot

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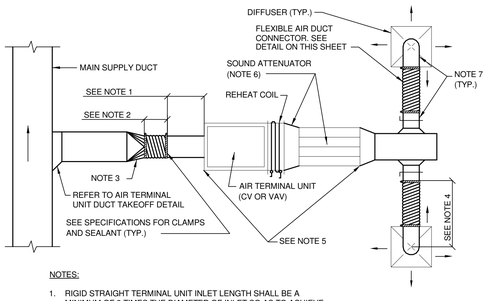
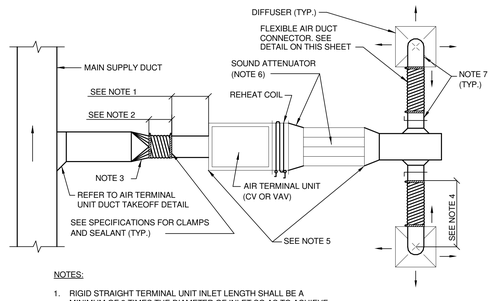


NOTES:

1. RIGID STRAIGHT TERMINAL UNIT INLET LENGTH SHALL BE A MINIMUM OF 3 TIMES THE DIAMETER OF INLET SO AS TO ACHIEVE ACCURATE AIRFLOW SENSOR READINGS.
2. A FLEXIBLE AIR DUCT CONNECTOR IS NOT MANDATORY FOR INLET TO THIS BOX, BUT ALLOWED TO ACCOMMODATE MINOR OFFSETS. MAXIMUM LENGTH 3'-0".
3. PROVIDE DUCT TRANSITION WHERE SCHEDULED DUCT RUNOUT SIZE TO UNIT IS DIFFERENT THAN TERMINAL UNIT INLET SIZE.
4. FLEXIBLE AIR DUCT CONNECTORS, WHEN USED FROM TERMINAL UNIT SUPPLY AIR DUCT TO DIFFUSER, SHALL NOT EXCEED 5'-0". USE RIGID ELBOWS FOR CHANGE OF DIRECTION GREATER THAN 45°.
5. COMPONENT ARRANGEMENT MAY VARY BY MANUFACTURER. PROVIDE INSULATION W/VAPOR BARRIER FOR CONNECTING DUCT SECTIONS.
6. PROVIDE SOUND ATTENUATOR. PROVIDE DUCT TRANSITION BETWEEN TERMINAL UNIT AND SOUND ATTENUATOR WHERE ATTENUATOR SIZE DIFFERS FROM TERMINAL UNIT OUTLET SIZE.
7. DUCT RUNOUT TO DIFFUSERS SHALL BE SAME SIZE AS THE DIFFUSER NECK SIZE UNLESS OTHERWISE NOTED.

(B330)

DUCT CONNECTIONS-AIR TERMINAL UNITS



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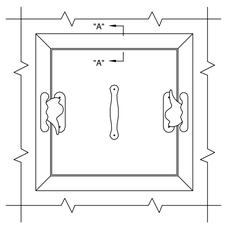
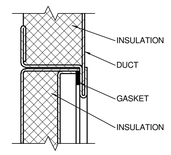
6. PROVIDE SOUND ATTENUATOR IF REQUIRED TO MEET DESIGN ROOM NC. PROVIDE DUCT TRANSITION BETWEEN TERMINAL UNIT AND SOUND ATTENUATOR WHERE ATTENUATOR SIZE DIFFERS FROM TERMINAL UNIT OUTLET SIZE.
7. DUCT RUNOUT TO DIFFUSERS SHALL BE SAME SIZE AS THE DIFFUSER NECK SIZE UNLESS OTHERWISE NOTED.

(B315)

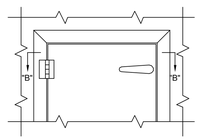
DUCT CONNECTIONS-AIR TERMINAL UNITS



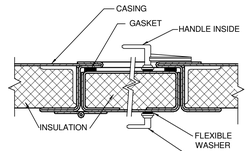
ACCESS PANEL



SECTION "A-A"



ACCESS DOOR

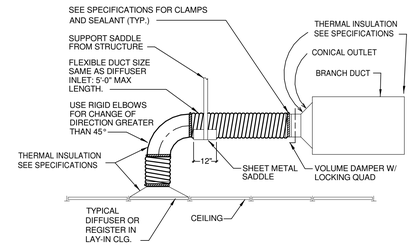


SECTION "B-B"

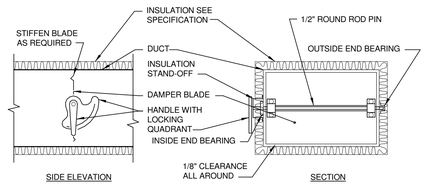
NOTES:

1. LATCHES SHALL BE OF THE WEDGE TYPE TO CLOSE DOORS TIGHTLY.
2. HINGES ON THE ACCESS DOORS SHALL HAVE NON-CORROSIVE PINS.
3. SEE SMACNA 2005, FIGURE 9-15

ACCESS PANEL AND DOOR DETAIL



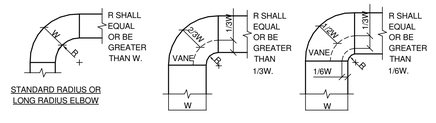
FLEXIBLE AIR DUCT CONNECTOR



NOTES:

1. DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
2. DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

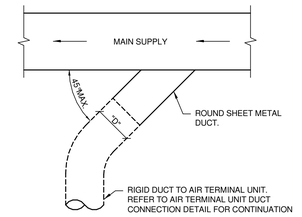
VOLUME DAMPER DETAIL



NOTES:

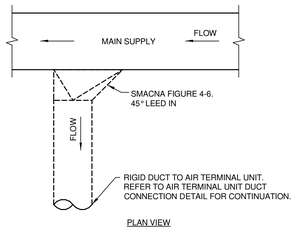
1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.
2. ALL STANDARD RADIUS ELBOWS CAN BE SUBSTITUTED WITH SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

DUCTWORK RADIUS ELBOWS



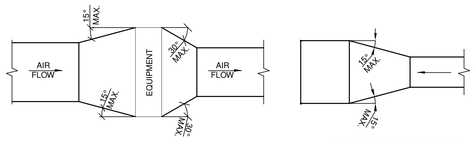
PLAN VIEW

SUPPLY DUCT TAKEOFF - AIR TERMINAL UNITS



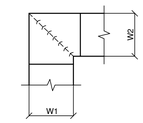
PLAN VIEW

ALTERNATE SUPPLY DUCT TAKEOFF - AIR TERMINAL UNITS



NOTE:
UNLESS OTHERWISE INDICATED ON PLANS, MAXIMUM ANGLES SHOWN SHALL APPLY.

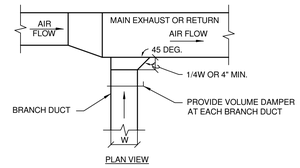
DUCTWORK TRANSITIONS



NOTES:

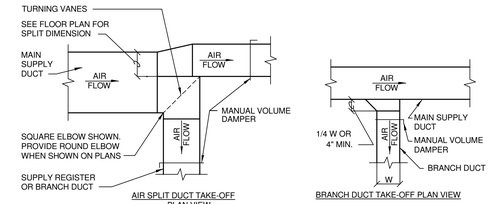
1. ALL VANE ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA.
2. WHEN W1 DOES NOT EQUAL W2, VANE SHALL BE SINGLE THICKNESS VANE TYPE REGARDLESS OF W DIMENSION.
3. ALL SINGLE THICKNESS VANES SHALL HAVE A 2" RADIUS, 1 1/2" MAXIMUM SPACE BETWEEN VANES AND A 3/4" TRAILING EDGE.
4. WHEN W EQUALS W2 AND W1 IS GREATER THAN 20", VANES SHALL BE DOUBLE VANE TYPE.

DUCTWORK SQUARE VANE ELBOWS



PLAN VIEW

EXHAUST OR RETURN BRANCH DUCTWORK

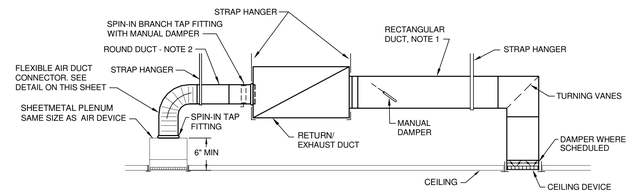


AIR SPLIT DUCT TAKE-OFF PLAN VIEW

BRANCH DUCT TAKE-OFF PLAN VIEW

THE BRANCH DUCT TAKE-OFF MAY BE USED FOR UP TO 15% OF THE MAIN DUCT CFM ANYTIME, AND UP TO 40% WHEN THE MAIN DUCT VELOCITY IS 1000 FPM OR LESS. THE AIR SPLIT DUCT TAKE-OFF SHALL BE USED IN ALL OTHER CASES

SUPPLY DUCTWORK TAKE-OFFS



NOTES:

1 BRANCH DUCT TAKE-OFF WITH MANUAL DAMPER.

2 BRANCH DUCT SIZES, UNLESS NOTED ON PLANS ARE TO BE SIZED AS FOLLOWS:
100 CFM AND LESS - 6" DIA.
101 CFM TO 250 CFM - 8" DIA.
251 CFM TO 400 CFM - 10" DIA.
401 CFM TO 700 CFM - 12" DIA.

RETURN OR EXHAUST GRILLE/REGISTER CONNECTION

1	35% Schematic Design	03.05.2015
2	65% Design Development	04.28.2015
3	95% Owner Review	08.14.2015
4	100% Construction Documents	11.04.2015
5	Bid Set Drawings	01.15.2016
Revisions		*Date*

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Ph 937-224-0861 Fax 937-224-5777 www.heapy.com
Heapy Project No.: 2014-04034 Firm License No.: 01528

STATE OF OHIO · GARY S. EODICE · E-52755 · REGISTERED PROFESSIONAL ENGINEER

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jpa@johnpoe.com

Drawing Title: DETAILS

Approved: Project Director

Project Title: RELOCATE PROSTHETICS AND PODIATRY CLINICS

Location: Dayton, Ohio

Date: 05.16.2016 | Checked: PCW | Drawn: WJS

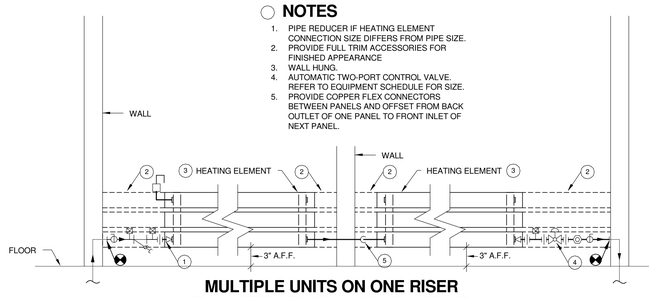
Project No. | VA Project No. 552-15-502 | JPA Project No. 14006.00

Building Number: 999

Drawing Number: M501 | Dwg. of

Office of Construction and Facilities Management
Department of Veterans Affairs

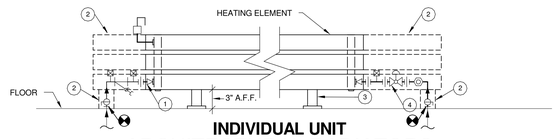
5/13/2016 11:59:43 AM



NOTES

1. PIPE REDUCER IF HEATING ELEMENT CONNECTION SIZE DIFFERS FROM PIPE SIZE.
2. PROVIDE FULL TRIM ACCESSORIES FOR FINISHED APPEARANCE
3. WALL HUNG.
4. AUTOMATIC TWO-PORT CONTROL VALVE. REFER TO EQUIPMENT SCHEDULE FOR SIZE.
5. PROVIDE COPPER FLEX CONNECTORS BETWEEN PANELS AND OFFSET FROM BACK OUTLET OF ONE PANEL TO FRONT INLET OF NEXT PANEL.

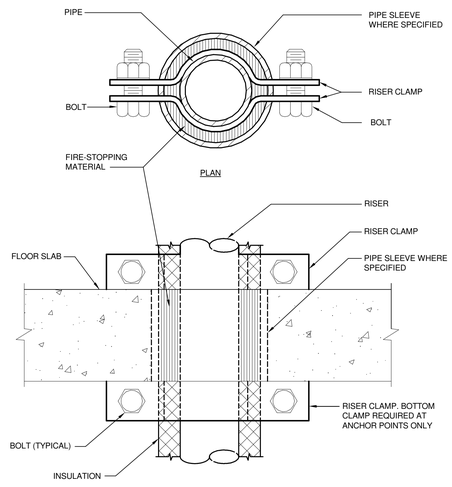
MULTIPLE UNITS ON ONE RISER
ARCHITECTURAL RADIATORS



NOTES

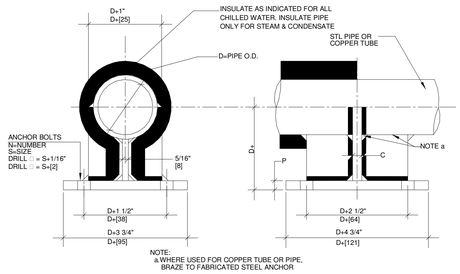
1. PIPE REDUCER IF HEATING ELEMENT CONNECTION SIZE DIFFERS FROM PIPE SIZE.
2. PROVIDE FULL TRIM ACCESSORIES FOR FINISHED APPEARANCE
3. WALL HUNG.
4. AUTOMATIC TWO-PORT CONTROL VALVE. REFER TO EQUIPMENT SCHEDULE FOR SIZE.

INDIVIDUAL UNIT
ARCHITECTURAL RADIATORS

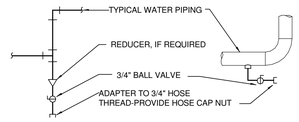


SUPPORT FOR PIPE RISERS

PIPE ANCHOR SCHEDULE										
D		P		C		N		S		BOLT PATTERN
IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	
4"	102	5/16	16	3/4	19	4"	102	3/4	19	
3"	76	1/2	13	1/2	13	4"	102	5/8	16	
2 1/2	64	3/8	10	3/8	10	4"	102	5/8	16	
2"	51	3/8	10	3/8	10	4"	102	5/8	16	
1 1/2	38	3/8	10	1/4	6	4"	102	1/2	13	

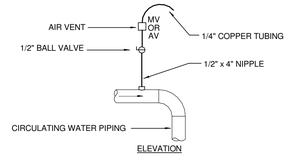


SMALL PIPE ANCHOR 1 1/2"- 4"



TYPICAL CHILLED AND HOT WATER PIPING DRAIN VALVE CONNECTIONS

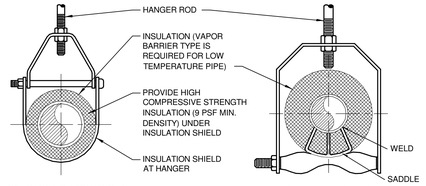
NOTES:
1. DRAIN ALL LOW POINTS AS INDICATED ABOVE.
2. WHERE SCALE POCKETS ARE SHOWN ON PIPE RISER DIAGRAMS AND/OR PLANS, LOCATE DRAIN AT BOTTOM OF SCALE POCKET.



TYPICAL MANUAL AIR VENT

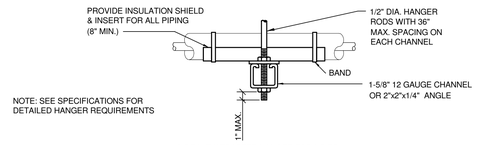
NOTES:
1. VENT ALL HIGH POINTS AS INDICATED ABOVE.
2. IF AUTOMATIC AIR VENTS ARE USED, PIPE DISCHARGE TO NEAREST DRAIN.

DRAIN VALVE AND AIR VENT CONNECTIONS (HYDRONIC SYSTEMS)



ADJUSTABLE CLEVIS HANGER TYPE 1 - SEE SPECIFICATIONS

ADJUSTABLE CLEVIS HANGER TYPE 43 - SEE SPECIFICATIONS

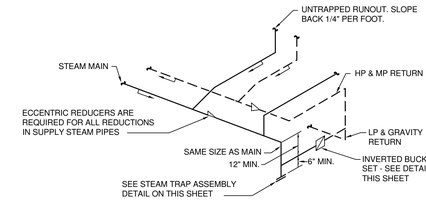


NOTE: SEE SPECIFICATIONS FOR DETAILED HANGER REQUIREMENTS

SIDE VIEW TRAPEZE HANGER FOR UP TO 1000 LB. UNIFORM LOAD

MAXIMUM PIPE/TUBING SUPPORT SPACING																		
NOM. SIZE IN.	THRU 3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24
PIPE FT.	7	7	7	9	10	11	12	14	16	17	19	22	23	25	27	28	30	32
TUBING FT.	5 FT	6	7	8	8	9	10	12	13	14	16	-	-	-	-	-	-	-
NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.																		

PIPE HANGERS



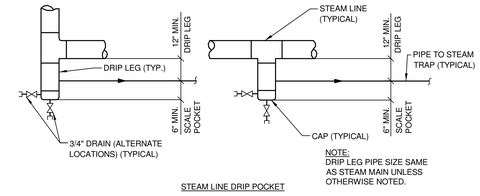
NOTES :

1 SLOPE MAINS AND BRANCHES DOWN 1" PER 40 FEET IN DIRECTION OF FLOW UNLESS SHOWN OTHERWISE.

2 LIMIT UNTRAPPED, COUNTERFLOW, RUNOUTS TO 10 FEET MAXIMUM.

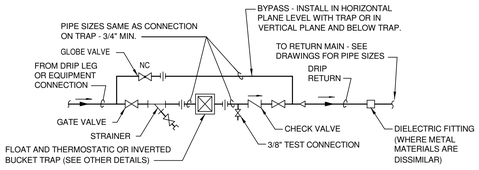
3 END OF MAIN SHOWN, LOW POINT IN STEAM MAIN SIMILAR.

TYPICAL STEAM LINE & DRIP PIPING



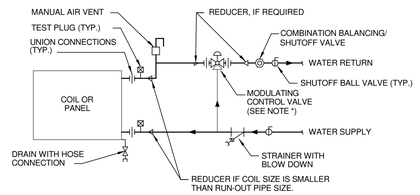
NOTE: DRIP LEG PIPE SIZE SAME AS STEAM MAIN UNLESS OTHERWISE NOTED.

STEAM LINE DRIP POCKET



STEAM TRAP ASSEMBLY

STEAM LINE DRIP POCKET
STEAM TRAP ASSEMBLY



* REFER TO SCHEDULES ON SHEETS M601 FOR VALVE TYPE (2-WAY OR 3-WAY)

TERMINAL UNIT
WATER COILS - PIPING CONNECTIONS

1	35% Schematic Design	03.05.2015
2	65% Design Development	04.28.2015
3	95% Owner Review	08.14.2015
4	100% Construction Documents	11.04.2015
5	Bid Set Drawings	01.15.2016
Revisions		Date

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Heapy Project No.: 2014-04034 Firm License No.: 01528

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Drawing Title: DETAILS

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Location: Dayton, Ohio

Date: 05.16.2016 | Checked: PCW | Drawn: WJS

Project No. VA Project No. 552-15-502 JPA Project No. 14006.00

Building Number: 999

Drawing Number: M502

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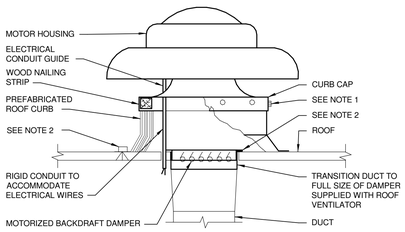
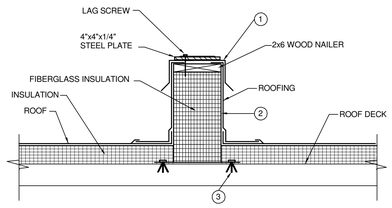
Office of Construction and Facilities Management
Department of Veterans Affairs



NOTES:

1. SECURE CURB CAP TO WOOD NAILING STRIP WITH 3/8" CADMIUM PLATED LAG BOLTS NOT OVER 12" ON CENTER.
2. SECURE ROOF CURB, DUCTWORK AND DAMPER TO ROOF WITH EXPANSION BOLTS (CONCRETE ROOF) OR RUST RESISTANT BOLTS (METAL DECK AND BAR JOIST ROOF).
3. SIZE OF DUCT THROUGH ROOF SHALL NOT BE LARGER THAN CURB SUPPLIED WITH ROOF VENTILATOR.
4. RUN ELECTRICAL LINES THROUGH CLEARANCE HOLE PROVIDED IN GRAVITY DAMPER, THEN THROUGH VENTILATOR ELECTRICAL CONDUIT GUIDE.

POWER ROOF VENTILATOR

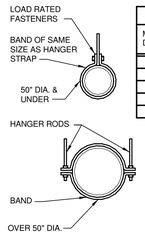


1. 18 GAUGE GALVANIZED STEEL COUNTER-FLASHING.
2. WELDED 14 GAUGE EQUIPMENT SUPPORT CURB, MEETING ASTM A-446, 525, 526 AND 527 REQUIREMENTS, WITH WELDED CORNERS WITH SEAMS JOINED BY CONTINUOUS WELDS. CURB SHALL BE INTERNALLY REINFORCED WITH BULKHEADS AND SPREADERS, 24" ON CENTER TO MEET LOAD RATING OF EQUIPMENT. CURB TO EXTEND 6" BEYOND EQUIPMENT. REFER TO FLOOR PLANS FOR HEIGHT.
3. SECURE CURB TO ROOF WITH EXPANSION BOLTS (CONCRETE ROOF) OR RUST RESISTANT BOLTS (METAL DECK AND BAR JOIST ROOF), 12" O.C.

GENERAL NOTE:

1. THIS DETAIL IS NOT INTENDED FOR ROOFTOP AHU SUPPORT. REFER TO STRUCTURAL DRAWINGS FOR REQUIREMENTS OF ROOFTOP AHU SUPPORT.

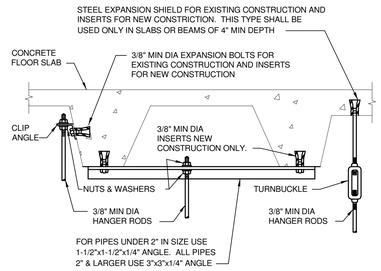
EQUIPMENT/DUCT SUPPORT ROOF CURB



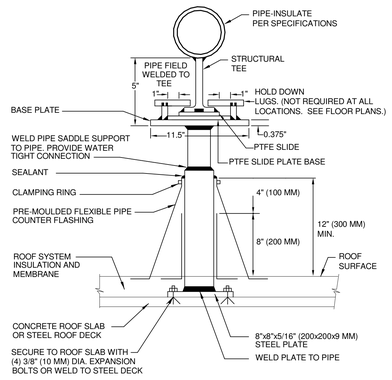
HANGER STRAPS OR RODS			
MAX. DUCT DIA. - IN.	QUANTITY/SIZE IN.	MAX. LOAD LBS.	MAX. SPACING IN.
26	ONE 1 x 22 GA. STRAP	260	144
36	ONE 1 x 18 GA. STRAP	420	144
50	ONE 1 x 16 GA. STRAP	700	144
60	TWO 3/8 DIA. RODS	1320	144
84	TWO 1/2 DIA. RODS	2500	144

NOTE:
TABULATED DATA FROM SMACNA ALLOWS FOR DUCT REINFORCING AND INSULATION, BUT NO EXTERNAL LOAD.

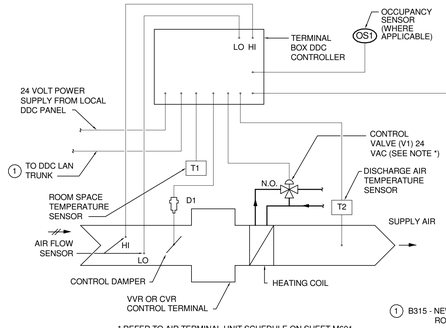
ROUND DUCT HANGERS



SECURING HANGER RODS IN CONCRETE

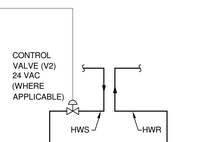


DETAIL FOR SUPPORTING PIPE ON ROOF



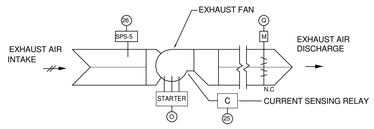
* REFER TO AIR TERMINAL UNIT SCHEDULE ON SHEET M601 FOR VALVE TYPE (2-WAY OR 3-WAY)

CVR AND VVR TERMINAL CONTROLS



1. B315 - NEW PANEL IN MECHANICAL ROOM 493

B330 - EXISTING PANEL IN BASEMENT MECHANICAL ROOM NEAR AHU-8



GENERAL EXHAUST FANS

1 EXHAUST FAN CONTROLS

1.1 EXHAUST FAN SHALL BE STARTED AND STOPPED BY THE DCP OR REMOTELY AT THE ECC. EACH FAN SHALL BE SOFTWARE INTERLOCKED TO OPERATE WITH ITS RESPECTIVE AIR HANDLING UNIT.
H-O-A SWITCH SHALL BE KEPT IN THE "AUTO" POSITION. "HAND" AND "OFF" SHALL BE USED ONLY FOR MAINTENANCE.

FUME HOOD EXHAUST FANS

1 EXHAUST FAN CONTROLS

1.1 EXISTING CONTROLS SHALL BE RELOCATED WITH THE HOODS AND TIED INTO NEW FANS.

GENERAL NOTES

1 A COMPLETE SYSTEM OF AUTOMATIC TEMPERATURE CONTROLS SHALL BE INSTALLED UNDER THIS CONTRACT AS REQUIRED TO ACCOMPLISH THE SEQUENCE OF CONTROL FOR VARIOUS ITEMS OF EQUIPMENT AND SYSTEMS AS DESCRIBED HEREINAFTER. THE SYSTEM SHALL BE A DIRECT DIGITAL CONTROL SYSTEM UTILIZING ELECTRIC ACTUATION.

2 ELECTRICAL WORK INCLUDES A POWER SOURCE TO THE MOTOR STARTERS. ALL HVAC POWER SOURCES REQUIRED BEYOND THESE STARTERS OR BEYOND SOURCES EXPLICITLY SHOWN ON THE ELECTRICAL DRAWINGS, SHALL BE PROVIDED UNDER THE ATC WORK. THIS WORK SHALL INCLUDE BUT NOT BE LIMITED TO WIRING, CONDUIT, TRANSFORMERS, RELAYS AND FUSES.

3 CONTROLS SHALL BE FULLY INTEGRATED INTO EXISTING CAMPUS SYSTEM AND PROPER GRAPHICS SHALL BE CREATED TO MIMIC EXISTING.

4 BULB WELLS FOR TEMPERATURE SENSING AS INDICATED SHALL BE FURNISHED UNDER THE ATC WORK AND INSTALLED AS PART OF THE HVAC PIPING WORK. PIPING WORK SHALL INCLUDE PROPERLY SIZED WELDOLET OR THREADOLET FITTINGS PLACED AS DIRECTED BY THE CONTROL SYSTEM SUPPLIER.

CVR & VVR CONTROL SEQUENCES WITH OCCUPANCY SENSING

1 CONSTANT VOLUME REHEAT TERMINAL CONTROL

1.1 DURING THE OCCUPIED MODE OF OPERATION, WHEN ROOM TEMPERATURE AT T1 IS BELOW SETPOINT, HOT WATER VALVE V1 AND V2 (WHERE APPLICABLE), SHALL MODULATE OPEN TO COIL TO MAINTAIN TEMPERATURE SETPOINT. BOX DAMPER D1 SHALL REMAIN AT CONSTANT MAXIMUM CFM.

1.2 EACH TERMINAL UNIT SHALL INCLUDE AN AIRFLOW SENSOR FOR CALCULATING CFM, AND A DISCHARGE AIR TEMPERATURE SENSOR.

1.3 EXTEND 24 VOLT POWER TO THE TERMINAL BOX CONTROLLER FROM THE ASSOCIATED AIR HANDLING UNIT DDC CONTROL PANEL.

1.4 ROOM SPACE TEMPERATURE SET POINT SHALL BE ADJUSTABLE FROM THE FRONT END COMPUTER INTERFACE.

1.5 OCCUPANCY SENSOR OS1 PROVIDED UNDER DIV. 26 SHALL DETERMINE OCCUPIED/UNOCCUPIED MODES OF OPERATION. TO INVOKE UNOCCUPIED SEQUENCE (1.6 BELOW), OCCUPANCY SENSORS FOR ALL SPACES ON A GIVEN TERMINAL UNIT ZONE MUST SATISFY THIS CONDITION. EXTEND LOW VOLTAGE WIRING FROM ALL APPLICABLE OCCUPANCY SENSOR(S) TO THE TERMINAL UNIT CONTROLLER.

1.6 DURING THE UNOCCUPIED MODE OF OPERATION, THE CONTROL DAMPER ACTUATOR D1 SHALL POSITION TO THE UNOCCUPIED AIRFLOW SETTING (REFER TO AIR TERMINAL UNIT SCHEDULE, SHEET M601).

1.7 DURING THE UNOCCUPIED MODE OF OPERATION, WHEN THE ROOM TEMPERATURE AT T1 IS BELOW THE UNOCCUPIED HEATING SETPOINT (REFER TO HVAC DESIGN DATA SCHEDULE, SHEET M601), THE CONTROL SHALL INDEX TO THE OCCUPIED HEATING MODE OF OPERATION. THE CONTROL SHALL REVERT TO UNOCCUPIED OPERATION (SEE 1.6 ABOVE) WHEN ROOM TEMPERATURE T1 RISES 2 DEGREES (ADJUSTABLE) ABOVE THE UNOCCUPIED HEATING SETPOINT.

1.8 DURING THE UNOCCUPIED MODE OF OPERATION, WHEN THE ROOM TEMPERATURE AT T1 IS ABOVE THE UNOCCUPIED COOLING SETPOINT (REFER TO HVAC DESIGN DATA SCHEDULE, SHEET M601), THE CONTROL SHALL INDEX TO THE OCCUPIED COOLING MODE OF OPERATION. THE CONTROL SHALL REVERT TO UNOCCUPIED OPERATION (SEE 1.6 ABOVE) WHEN ROOM TEMPERATURE T1 REDUCES 2 DEGREES (ADJUSTABLE) BELOW THE UNOCCUPIED COOLING SETPOINT.

2 VARIABLE VOLUME REHEAT TERMINAL CONTROL

2.1 DURING THE OCCUPIED MODE OF OPERATION, WHEN ROOM TEMPERATURE AT T1 IS BELOW SETPOINT, THE CONTROL DAMPER ACTUATOR, D1 SHALL MODULATE THE DAMPER TO REDUCE AIRFLOW TO THE SUMMER MINIMUM SETTING, ON A FURTHER DROP IN ROOM TEMPERATURE AT T1, THE CONTROL DAMPER SHALL BE MODULATED UPWARD TO THE WINTER MINIMUM AIRFLOW AND THE HOT WATER VALVE V1 AND V2 (WHERE APPLICABLE) SHALL MODULATE OPEN TO COIL TO MAINTAIN TEMPERATURE SETPOINT.

2.2 DURING THE OCCUPIED MODE OF OPERATION, AS ROOM TEMPERATURE RISES ABOVE SETPOINT, HOT WATER VALVE V1 SHALL CLOSE. IF THE ROOM TEMPERATURE CONTINUES TO RISE ABOVE SETPOINT, DAMPER D1 SHALL MODULATE FROM SUMMER (COOLING) MINIMUM AIRFLOW TO MAXIMUM AIRFLOW TO MAINTAIN ROOM TEMPERATURE.

2.3 EACH TERMINAL UNIT SHALL INCLUDE AN AIRFLOW SENSOR FOR CALCULATING CFM, AND A DISCHARGE AIR TEMPERATURE SENSOR

2.4 EXTEND 24 VOLT POWER TO THE TERMINAL BOX CONTROLLER FROM THE ASSOCIATED AIR HANDLING UNIT DDC CONTROL PANEL.

2.5 ROOM SPACE TEMPERATURE SET POINT SHALL BE ADJUSTABLE FROM THE FRONT END COMPUTER INTERFACE.

2.6 OCCUPANCY SENSOR OS1 PROVIDED UNDER DIV. 26 SHALL DETERMINE OCCUPIED/UNOCCUPIED MODES OF OPERATION. TO INVOKE UNOCCUPIED SEQUENCE (2.7 BELOW), OCCUPANCY SENSORS FOR ALL SPACES ON A GIVEN TERMINAL UNIT ZONE MUST SATISFY THIS CONDITION. EXTEND LOW VOLTAGE WIRING FROM ALL APPLICABLE OCCUPANCY SENSOR(S) TO THE TERMINAL BOX CONTROLLER.

2.7 DURING THE UNOCCUPIED MODE OF OPERATION, THE CONTROL DAMPER ACTUATOR D1 SHALL POSITION TO THE UNOCCUPIED AIRFLOW SETTING (REFER TO AIR TERMINAL UNIT SCHEDULE, SHEET M601).

2.8 DURING THE UNOCCUPIED MODE OF OPERATION, WHEN THE ROOM TEMPERATURE AT T1 IS BELOW THE UNOCCUPIED HEATING SETPOINT (REFER TO HVAC DESIGN DATA SCHEDULE, SHEET M601), THE CONTROL SHALL INDEX TO THE OCCUPIED HEATING MODE OF OPERATION. THE CONTROL SHALL REVERT TO UNOCCUPIED OPERATION (SEE 2.7 ABOVE) WHEN ROOM TEMPERATURE T1 RISES 2 DEGREES (ADJUSTABLE) ABOVE THE UNOCCUPIED HEATING SETPOINT.

2.9 DURING THE UNOCCUPIED MODE OF OPERATION, WHEN THE ROOM TEMPERATURE AT T1 IS ABOVE THE UNOCCUPIED COOLING SETPOINT (REFER TO HVAC DESIGN DATA SCHEDULE, SHEET M601), THE CONTROL SHALL INDEX TO THE OCCUPIED COOLING MODE OF OPERATION. THE CONTROL SHALL REVERT TO UNOCCUPIED OPERATION (SEE 2.7 ABOVE) WHEN ROOM TEMPERATURE T1 REDUCES 2 DEGREES (ADJUSTABLE) BELOW THE UNOCCUPIED COOLING SETPOINT.

Revisions		Date
1	35% Schematic Design	03.05.2015
2	65% Design Development	04.28.2015
3	95% Owner Review	08.14.2015
4	100% Construction Documents	11.04.2015
5	Bid Set Drawings	01.15.2016

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Drawing Title: DETAILS AND CONTROLS

Approved: Project Director

Project Title: RELOCATE PROSTHETICS AND PODIATRY CLINICS

Location: Dayton, Ohio

Date: 05.16.2016 | Checked: PCW | Drawn: WJS

Project No.
VA Project No. 552-15-502
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Building Number: 999

Drawing Number: M503

Dwg. of

Office of Construction and Facilities Management
Department of Veterans Affairs

AIR DISTRIBUTION DEVICES

SYMBOL	DESCRIPTION	TYPE MOUNTING		MATERIAL		FINISH		ACCESSORIES	SEE NOTE
		LAY-IN	SURFACE	STEEL	ALUM.	E.C.L.	W.B.E.		
BG1	HEAVY DUTY FIXED BLADE GRILLE - 38" HORIZONTAL BLADES-0.5" SPACING		∘	∘			∘		
CD1	STANDARD SQ. PLAQUE CEILING DIFFUSER ROUND NECK	∘		∘			∘		
CD2	STANDARD SQ. PLAQUE CEILING DIFFUSER ROUND NECK		∘	∘			∘		
CD3	LINEAR PLENUM SLOT ADJUSTABLE BLADE DIFFUSER	∘		∘			∘	INSULATED PLENUM	1,2
CG1	EGGCRATE CEILING GRILLE	∘			∘		∘		
CG2	EGGCRATE CEILING GRILLE		∘		∘		∘		
CR1	EGGCRATE CEILING REGISTER	∘			∘		∘	OPPOSED BLADE DAMPER	
CR2	EGGCRATE CEILING REGISTER		∘		∘		∘	OPPOSED BLADE DAMPER	
TG1	FIXED BLADE GRILLE 45 DEGREE BLADES - 0.75" SPACING		∘		∘				3
TR1	ADJUSTABLE BLADE REGISTER 0.75" SPACING		∘		∘		∘	OPPOSED BLADE DAMPER	3
TR2	FIXED BLADE REGISTER 45 DEGREE BLADES - 0.75" SPACING		∘		∘		∘	OPPOSED BLADE DAMPER	3

NOTES:
1 48" LENGTH, 3-1" SLOTS
2 AIR DEVICE TO INCLUDE A CENTER NOTCH TO ACCOMMODATE A 2 FT. X 2 FT. CEILING GRID.
3 HORIZONTAL BLADES

FAN SCHEDULE

FAN NO. (2)	LOCATION	FAN CFM	FAN S.P.	FAN TYPE	DESCRIPTION	WHEEL		MAX. RPM	DRIVE	MAX. SONES (dBA)	MOTOR				SEE NOTE
						TYPE	MIN. DIA.				MAX. BHP	NOM. HP (1)	PHASE VOLT.	VSD	
EF-212	B315 ROOF	900	1"	PEF	PLUME EXHAUST FAN	BIW	15"	2,700	BELT	-	3.48	5	460-3PH	NO	3
EF-213	B315 ROOF	900	1"	PEF	PLUME EXHAUST FAN	BIW	15"	2,700	BELT	-	3.48	5	460-3PH	NO	3
EF-215	B315 ROOF	1740	0.4"	PEF	PLUME EXHAUST FAN	BIW	12"	1,200	DIRECT	6.4	0.21	0.25	115-1PH	NO	
EF-1	B315 ROOF	2500	0.75"	CF	POWER ROOF VENTILATOR	BIW	16"	1,200	BELT	13.9	0.63	0.75	460-3PH	NO	
EF-2	B315 ROOF	1640	0.4"	CF	POWER ROOF VENTILATOR	BIW	16"	800	BELT	6.4	0.21	0.25	115-1PH	NO	

NOTES :
1 MOTORS SHALL BE ENERGY EFFICIENT TYPE.
2 CONTACT PLANT ENGINEERING FOR ACTUAL FAN NUMBER.
3 LAB SYSTEM EXHAUST=900 CFM; BYPASS AIRFLOW=3233 CFM; TOTAL INLET AIRFLOW=3222 CFM; ENTRAINMENT AIRFLOW=1189 CFM; TOTAL OUTLET AIFLOW=4411 CFM.

DUCT PRESSURE CLASS & LEAKAGE TABLE

SYSTEM	DUCT INVOLVED	POSITIVE (P) OR NEGATIVE (N) PRESSURE	SMACNA CONST. CLASS W.G.	SMACNA SEAL CLASS	SMACNA LEAKAGE CLASS	
					RECTANGULAR DUCT	ROUND DUCT
ALL SYSTEMS	ALL DUCTWORK EXCEPT AS LISTED BELOW.	P/N	± 2"	A	6	3
	SUPPLY AIR DUCTS FROM OUTLET OF AH-UNIT TO INLET OF AIR TERMINAL UNITS.	P	4"	A	6	3
	SUPPLY AIR DUCTS FROM OUTLET OF AIR TERMINAL UNITS TO SUPPLY AIR DEVICES	P	1"	A	6	3
	RETURN AIR DUCTS FROM CEILING REGISTERS TO INLET OF AH-UNIT	N	-2"	A	6	3
	GENERAL EXHAUST DUCTS	N	-2"	A	6	3
	LABORATORY HOOD DUCTS	WELDED STAINLESS STEEL				

HVAC DESIGN DATA

OUTDOOR DESIGN TEMPERATURES– 90.3 DEG. F Db SUMMER; 73.6 DEG. F Wb SUMMER; 0 DEG. F Db WINTER; DESIGN ALTITUDE:1004 FT.

INDOOR AREA DESIGN CONDITIONS	SUMMER		WINTER	
	Db (°F)	% HUMIDITY	Db (°F)	% HUMIDITY
BATHROOMS & TOILET ROOMS	75	-	68	30
ALL OTHER AREAS	75	50	70	30
UNOCCUPIED MODE (1)	80	-	60	-

NOTES:
1 REFERS TO OCCUPANCY STATUS FOR CONTROL OF AIR TERMINAL UNITS. REFER TO AIR TERMINAL UNIT SCHEDULE ON THIS SHEET AND CONTROL SEQUENCES ON SHEET M503.

ROOM HEATING UNITS

GENERAL NOTES
- HEATING CAPACITY BASED ON 65° ENT. AIR & 160° ENT. WATER
- MAXIMUM WATER PRESS. DROP THRU COIL 5 FT.
- REFER TO PLANS FOR LENGTH OF EACH HEATER
- SEE PIPING DETAILS ON SHEET M502.

UNIT NO.	DESCRIPTION	MOUNTING	CFM	HTG. MBH	GPM	RUNOUT SIZE	AUTO. VALVE	APPROX. CABINET DIMENSIONS				REMARKS
								LENGTH	DEPTH	HEIGHT	RECESS	
R1	ARCHITECTURAL RADIATOR	WALL MOUNTED	-	0.94/FT.	0.09/FT.	0.75	0.75	VARIES	3.625"	8.5"	-	1,2
R2	ARCHITECTURAL RADIATOR	PEDESTAL MOUNTED	-	0.94/FT.	0.09/FT.	0.75	0.75	VARIES	3.625"	8.5"	-	1,2

REMARKS:
1. RADIATORS SHALL BE R2F-3 SERIES.
2. MOUNT UNIT 4" A.F.F.

SOUND ATTENUATING DEVICE SCHEDULE

MARK	LOCATION ROOM #	SYSTEM AND/OR SERVICE	TYPE	AIRFLOW		APD		INLET SIZE		LENGTH		DYNAMIC INSERTION LOSS DB OCTAVE BAND AND MID-FREQUENCY [CPS]								REMARKS
				CFM	[L/s]	IN WG	[Pa]	IN	[mm]	IN	[mm]	63	125	250	500	1000	2000	4000	8000	
												1	2	3	4	5	6	7	8	
SA3	493	315-AHU1	CIRCULAR	7,210		0.2		28"		XX		5	8	13	26	34	26	22	16	2ND FLR SA DUCT
SA4	493	315-AHU1	CIRCULAR	8,720		0.2		28"				5	8	13	26	34	26	22	16	2ND FLR SA DUCT

NOTE :
IN THE INLET SIZE COLUMN, WHEN ONE VALUE IS INDICATED, THE DUCT IS A ROUND DUCT. IF SIZE IS INDICATED AS ## x ##, "THE DUCT IS A RECTANGULAR DUCT WITH SPECIFICATIONS OF "DUCT WIDTH" BY "DUCT DEPTH."

AIR TERMINAL UNIT SCHEDULE (B315)

UNIT NO.	CFM				APPROX. INLET SIZE (IN.)	DUCT RUNOUT SIZE TO UNIT (IN.) (1)	UNIT MAX. SP AT MAX. CFM (2)	SOUND REQUIREMENTS		HOT WATER HEATING COIL								CONTROL TYPE (6)
	MAX.	WINTER MIN.	SUMMER MIN.	UNOCCUPIED (7)				SP ACROSS UNIT AT MAXIMUM ROOM NC	MAX. ROOM NC (3) (4)	ENT. AIR TEMP. F°	ENT. WATER TEMP. F°	GPM	MAX. WATER P.D. FT. HD.	PIPE RUNOUT SIZE TO COIL	AUTO VALVE Cv	AUTO VALVE TYPE	MIN. MBH (5)	
2-01	290	290	45	45	6	6	0.35"	3.0"	35	55	160	0.6	2	0.75"	0.3	2-WAY	8	V.V.R.
2-02	360	200	55	55	6	6	0.35"	3.0"	35	55	160	0.6	2	0.75"	0.3	2-WAY	8	V.V.R.
2-03	220	220	35	35	6	6	0.35"	3.0"	35	55	160	0.5	2	0.75"	0.2	2-WAY	6	V.V.R.
2-04	755	380	115	115	9	9	0.35"	3.0"	35	55	160	1.0	2	0.75"	0.5	2-WAY	14	V.V.R.
2-05	745	375	115	115	9	9	0.35"	3.0"	35	55	160	0.9	2	0.75"	0.4	2-WAY	13	V.V.R.
2-06	160	160	25	25	6	6	0.35"	3.0"	35	55	160	0.5	2	0.75"	0.1	2-WAY	4	V.V.R.
2-07	835	580	130	130	9	9	0.35"	3.0"	35	55	160	1.7	2	0.75"	0.8	2-WAY	24	V.V.R.
2-08	365	225	55	55	7	7	0.35"	3.0"	35	55	160	0.7	2	0.75"	0.3	2-WAY	9	V.V.R.
2-11	700	350	105	105	9	9	0.35"	3.0"	35	55	160	0.6	2	0.75"	0.3	2-WAY	8	V.V.R.
2-14	460	230	70	70	7	7	0.35"	3.0"	35	55	160	0.7	2	0.75"	0.3	2-WAY	10	V.V.R.
2-15	540	465	85	85	7	7	0.35"	3.0"	35	55	160	1.4	2	0.75"	0.7	2-WAY	20	V.V.R.
2-16	555	555	85	85	8	8	0.35"	3.0"	35	55	160	1.6	2	0.75"	0.8	2-WAY	23	V.V.R.
2-17	480	240	75	75	7	7	0.35"	3.0"	35	55	160	0.6	2	0.75"	0.3	3-WAY	8	V.V.R.
2-18	310	310	50	50	6	6	0.35"	3.0"	35	55	160	0.9	2	0.75"	0.4	2-WAY	13	V.V.R.
2-21	1385	1385	210	210	14	14	0.35"	3.0"	35	55	160	4.1	2	1"	1.9	2-WAY	60	C.V.R.
2-22	1060	725	160	160	12	12	0.35"	3.0"	35	55	160	1.9	2	1"	0.9	2-WAY	27	C.V.R.
2-23	480	480	75	75	7	7	0.35"	3.0"	35	55	160	1.4	2	0.75"	0.7	3-WAY	20	V.V.R.
2-24	630	395	95	95	9	9	0.35"	3.0"	35	55	160	1.1	2	0.75"	0.5	2-WAY	16	V.V.R.
2-25	330	330	50	50	6	6	0.35"	3.0"	35	55	160	0.6	2	1"	0.3	2-WAY	9	C.V.R.
2-26	590	295	90	90	8	8	0.35"	3.0"	35	55	160	0.9	2	1"	0.4	2-WAY	13	C.V.R.

NOTES :
1 PROVIDE DUCT TRANSITION AT UNIT INLET WHERE UNIT INLET SIZE AND DUCT RUNOUT SIZE ARE DIFFERENT.
2 THE UNIT MAXIMUM SP IS THE PRESSURE DIFFERENCE BETWEEN THE UNIT INLET AND DISCHARGE INCLUDING REHEAT COIL AND SOUND ATTENUATOR. IT IS ALSO THE MINIMUM PRESSURE REQUIRED AT THE UNIT INLET TO OBTAIN THE RATED CFM.
3 PROVIDE HOSPITAL GRADE SOUND ATTENUATOR WHERE REQUIRED TO CONFORM TO THE MAXIMUM NC35 REQUIREMENT.
4 UNIT NOISE LEVEL SELECTION SHALL NOT EXCEED A ROOM NC OF 35 FROM BOTH AIRBORNE AND RADIATED NOISE, BASED ON A 10 DB ROOM ABSORPTION COFFICIENT (REFERENCE 10 [-12] WATTS) WITH 3" S.P. DIFFERENTIAL ACROSS UNIT AT MAXIMUM CFM SETTING.
5 HEATING COIL CAPACITY BASED ON WINTER MINIMUM CFM.
6 CONTROL TYPES: V.V.R.: VARIABLE VOLUME REHEAT TERMINAL; C.V.R.: CONSTANT VOLUME REHEAT TERMINAL
7 AIR TERMINAL UNIT WITH AIRFLOW LISTED IN THIS COLUMN IS CONNECTED TO AN OCCUPANCY SENSOR PROVIDED BY DIVISION 26, FOR UNOCCUPIED CONTROL MODE. REFER TO CONTROL SEQUENCES ON SHEET M503, AND UNOCCUPIED HEATING & COOLING SETPOINTS IN "HVAC DESIGN DATA" SCHEDULE ON THIS SHEET.

AIR TERMINAL UNIT SCHEDULE (B330)

UNIT NO.	CFM				APPROX. INLET SIZE (IN.)	DUCT RUNOUT SIZE TO UNIT (IN.) (1)	UNIT MAX. SP AT MAX. CFM (2)	SOUND REQUIREMENTS		HOT WATER HEATING COIL								CONTROL TYPE (6)
	MAX.	WINTER MIN.	SUMMER MIN.	UNOCCUPIED (7)				SP ACROSS UNIT AT MAXIMUM ROOM NC	MAX. ROOM NC (3) (4)	ENT. AIR TEMP. F°	ENT. WATER TEMP. F°	GPM	MAX. WATER P.D. FT. HD.	PIPE RUNOUT SIZE TO COIL	AUTO VALVE Cv	AUTO VALVE TYPE	MIN. MBH (5)	
8-06	410	205	65	65	7	9	0.35"	3.0"	35	55	160	0.5	2	0.75"	0.2	2-WAY	5	V.V.R.
8-07	870	870	135	135	9	11	0.35"	3.0"	35	55	160	1.7	2	0.75"	0.8	2-WAY	24	V.V.R.
8-08	540	-	85	-	7	9	0.35"	3.0"	35	-	-	-	-	-	-	-	-	V.V.
8-09	85	85	15	15	6	8	0.35"	3.0"	35	55	160	0.5	2	0.75"	0.2	2-WAY	2	V.V.R.
8-11	1085	675	165	165	12	14	0.35"	3.0"	35	55	160	2.0	2	0.75"	0.9	2-WAY	29	V.V.R.
8-14	930	530	140	140	12	14	0.35"	3.0"	35	55	160	1.6	2	0.75"	0.8	2-WAY	23	V.V.R.
8-15	135	70	25	25	6	8	0.35"	3.0"	35	55	160	0.5	2	0.75"	0.2	2-WAY	2	V.V.R.
8-16	145	110	25	25	6	8	0.35"	3.0"	35	55	160	0.5	2	0.75"	0.2	2-WAY	3	V.V.R.
8-17	1080	685	165	165	12	14	0.35"	3.0"	35	55	160	2.0	2	0.75"	0.9	3-WAY	30	V.V.R.
8-18	760	450	115	115	9	11	0.35"	3.0"	35	55	160	1.4	2	0.75"	0.7	2-WAY	20	V.V.R.
8-19	715	410	110	110	9	11	0.35"	3.0"	35	55	160	1.2	2	0.75"	0.6	2-WAY	18	V.V.R.
8-20	345	210	55	55	6	8	0.35"	3.0"	35	55	160	0.5	2	0.75"	0.2	2-WAY	5	V.V.R.
8-21	510	255	80	80	7	9	0.35"	3.0"	35	55	160	0.5	2	0.75"	0.2	2-WAY	6	V.V.R.
8-27	1030	715	155	155	12	14	0.35"	3.0"	35	55	160	1.2	2	0.75"	0.6	2-WAY	18	V.V.R.
8-30	540	290	85	85	7	9	0.35"	3.0"	35	55	160	0.5	2	0.75"	0.2	2-WAY	7	V.V.R.
8-31	320	205	50	50	6	8	0.35"	3.0"	35	55	160	0.5	2	0.75"	0.2	3-WAY	5	V.V.R.
8-32	120	80	20	20	6	8	0.35"	3.0"	35	55	160	0.5	2	0.75"	0.2	2-WAY	2	V.V.R.
8-33	210	210	35	35	6	8	0.35"	3.0"	35	55	160	0.5	2	0.75"	0.2	2-WAY	5	V.V.R.
8-36	210	110	35	35	6	8	0.35"	3.0"	35	55	160	0.5	2	0.75"	0.2	3-WAY	3	V.V.R.
8-37	520	520	80	80	7	9	0.35"	3.0"	35	55	160	0.9	2	0.75"	0.4	2-WAY	13	V.V.R.
8-38	345	195	55	55	6	8	0.35"	3.0"	35	55	160	0.6	2	0.75"	0.3	2-WAY	8	V.V.R.
8-39	120	70	20	20	6	8	0.35"	3.0"	35	55	160	0.5	2	0.75"	0.2	2-WAY	3	V.V.R.

NOTES :
1 PROVIDE DUCT TRANSITION AT UNIT INLET WHERE UNIT INLET SIZE AND DUCT RUNOUT SIZE ARE DIFFERENT.
2 THE UNIT MAXIMUM SP IS THE PRESSURE DIFFERENCE BETWEEN THE UNIT INLET AND DISCHARGE INCLUDING REHEAT COIL AND SOUND ATTENUATOR. IT IS ALSO THE MINIMUM PRESSURE REQUIRED AT THE UNIT INLET TO OBTAIN THE RATED CFM.
3 PROVIDE HOSPITAL GRADE SOUND ATTENUATOR WHERE REQUIRED TO CONFORM TO THE MAXIMUM NC35 REQUIREMENT.
4 UNIT NOISE LEVEL SELECTION SHALL NOT EXCEED A ROOM NC OF 35 FROM BOTH AIRBORNE AND RADIATED NOISE, BASED ON A 10 DB ROOM ABSORPTION COFFICIENT (REFERENCE 10 [-12] WATTS) WITH 3" S.P. DIFFERENTIAL ACROSS UNIT AT MAXIMUM CFM SETTING.
5 HEATING COIL CAPACITY BASED ON WINTER MINIMUM CFM.
6 CONTROL TYPES: V.V.R.: VARIABLE VOLUME REHEAT TERMINAL; C.V.R.: CONSTANT VOLUME REHEAT TERMINAL
7 AIR TERMINAL UNIT WITH AIRFLOW LISTED IN THIS COLUMN IS CONNECTED TO AN OCCUPANCY SENSOR PROVIDED BY DIVISION 26, FOR UNOCCUPIED CONTROL MODE. REFER TO CONTROL SEQUENCES ON SHEET M503, AND UNOCCUPIED HEATING & COOLING SETPOINTS IN "HVAC DESIGN DATA" SCHEDULE ON THIS SHEET.

1	35% Schematic Design	03.05.2015
2	65% Design Development	04.28.2015
3	95% Owner Review	08.14.2015
4	100% Construction Documents	11.04.2015
5	Bid Set Drawings	01.15.2016
Revisions		Date

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Heapy Project No.: 2014-04034 Firm License No.: 01528

STATE OF OHIO — GARY S. EDDICE E--52755 — REGISTERED PROFESSIONAL ENGINEER

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Drawing Title: SCHEDULES

Approved: Project Director

Project Title: RELOCATE PROSTHETICS AND PODIATRY CLINICS

Location: Dayton, Ohio

Date: 05.16.2016 | Checked: PCW | Drawn: WJS

Project No. VA Project No. 552-15-502 JPA Project No. 14006.00

Building Number: 999

Drawing Number: M601

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one-eighth inch = one foot | one-quarter inch = one foot | three-eighths inch = one foot | one-half inch = one foot | one inch = one foot | three inches = one foot

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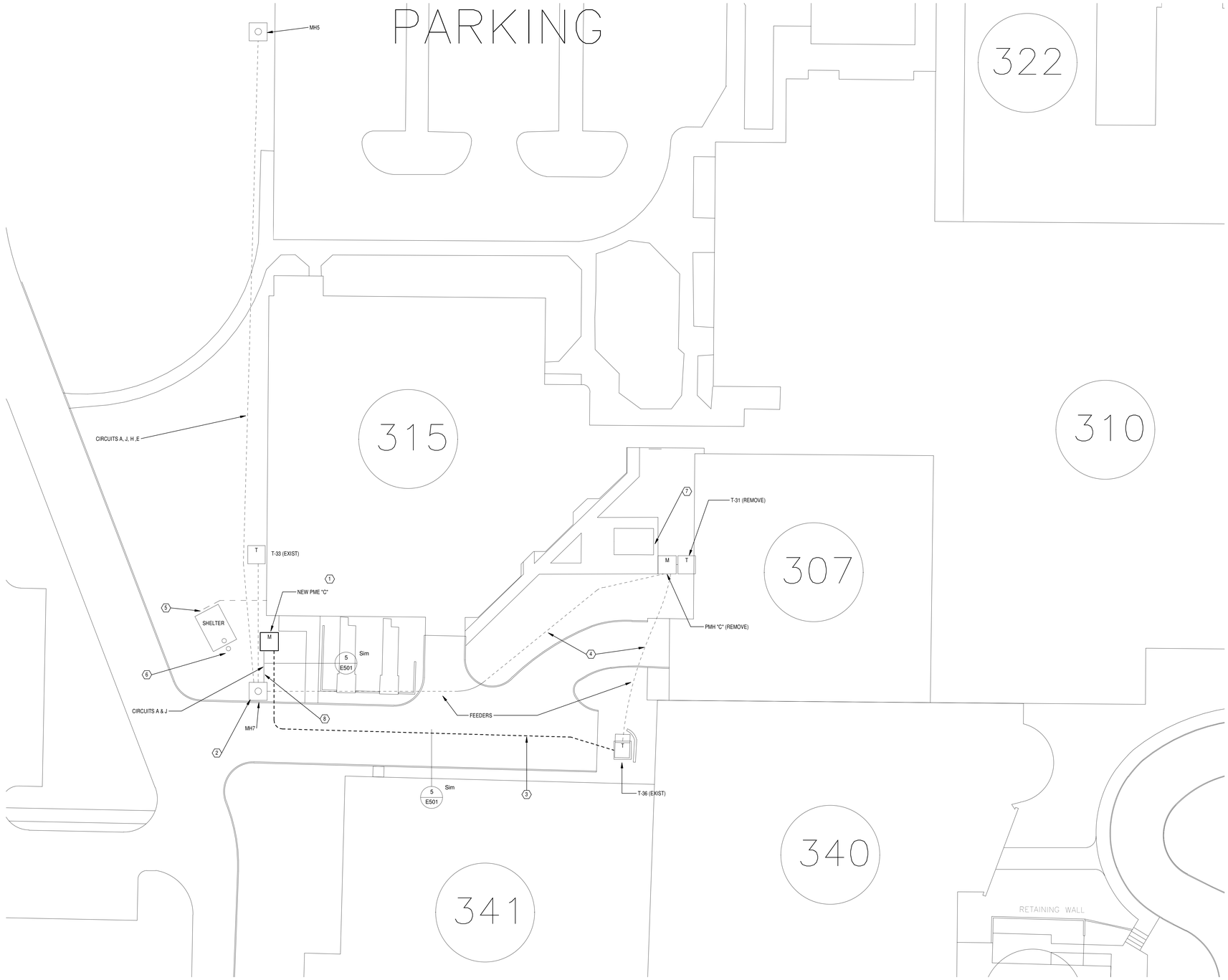

GENERAL NOTES

A REFER TO SHEET E001 FOR LEGEND, SYMBOLS & INDEX OF DRAWINGS.

PLAN NOTES

1. NEW PADMOUNT "PME" SWITCH. FEED FROM EXISTING CIRCUIT IN MANHOLE #5. INSTALL 6" CONCRETE PAD FOR SWITCH.
2. PROVIDE DEAD BREAK ELBOWS IN MANHOLE FOR CONNECTION TO NEW PME "C" FEEDER.
3. CUT AND PATCH ROAD FOR TRANSFORMER T-36 FEEDER. SEE SINGLE-LINE DIAGRAM FOR FURTHER DETAILS.
4. REMOVE CABLES FROM EXISTING CONDUITS.
5. RELOCATED SMOKING SHELTER. PROVIDE ELECTRIC SERVICE AS INDICATED. REFEED FROM BUILDING #315. 4#2 AWG, 8 GRND, 1-1/4"C. PROVIDE GROUND ROD AT SERVICE PANEL AND BOND TO GROUND IN PANEL. #8 BARE SOLID GROUND WIRE. CONNECT TO MAIN PANEL "MD" SPARE 100/3A CIRCUIT BREAKER LOCATED IN ELECTRIC ROOM.
6. WIRE (2) ADA BUTTONS ON BOLLARDS TO MOTORIZED DOOR IN SHELTER. 2#12, 1/2 GRND 3/4C". ONE INSIDE AND ONE OUTSIDE AT DOOR. RELOCATE THEM FROM EXISTING SHELTER LOCATION. SEE ENLARGED SHELTER ON ARCHITECTURAL SHEETS FOR FURTHER DETAILS.
7. OLD SHELTER LOCATION. DISCONNECT ELECTRIC FEEDER AND REMOVE WIRE AND CONDUIT BACK TO SOURCE. PANEL 4E-GB.
8. (4) 4" CONDUITS IN DUCT BANK. CIRCUITS A & J TO NEW PME-C SWITCH. RUN (3)#350 1-CONDUCTOR 15KV CABLE IN 4"C. FOR EACH CIRCUIT. INCLUDE TWO 4" SPARES IN DUCTBANK.

N
PROJECT

SITE PLAN

Scale: 1" = 20'-0"

1	35% Schematic Design	03.05.2015
2	65% Design Development	04.28.2015
3	95% Owner Review	08.14.2015
4	100% Construction Documents	11.04.2015
5	Bid Set Drawings	01.15.2016
Revisions		*Date*

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Drawing Title: ELECTRICAL SITE PLAN

Approved: Project Director

Project Title: RELOCATE PROSTHETICS AND PODIATRY CLINICS

Location: Dayton, Ohio

Date: 05.16.2016 | Checked: MSG | Drawn: SC

Project No. VA Project No. 552-15-502 JPA Project No. 14006.00

Building Number: 999

Drawing Number: ES001 Dwg. of

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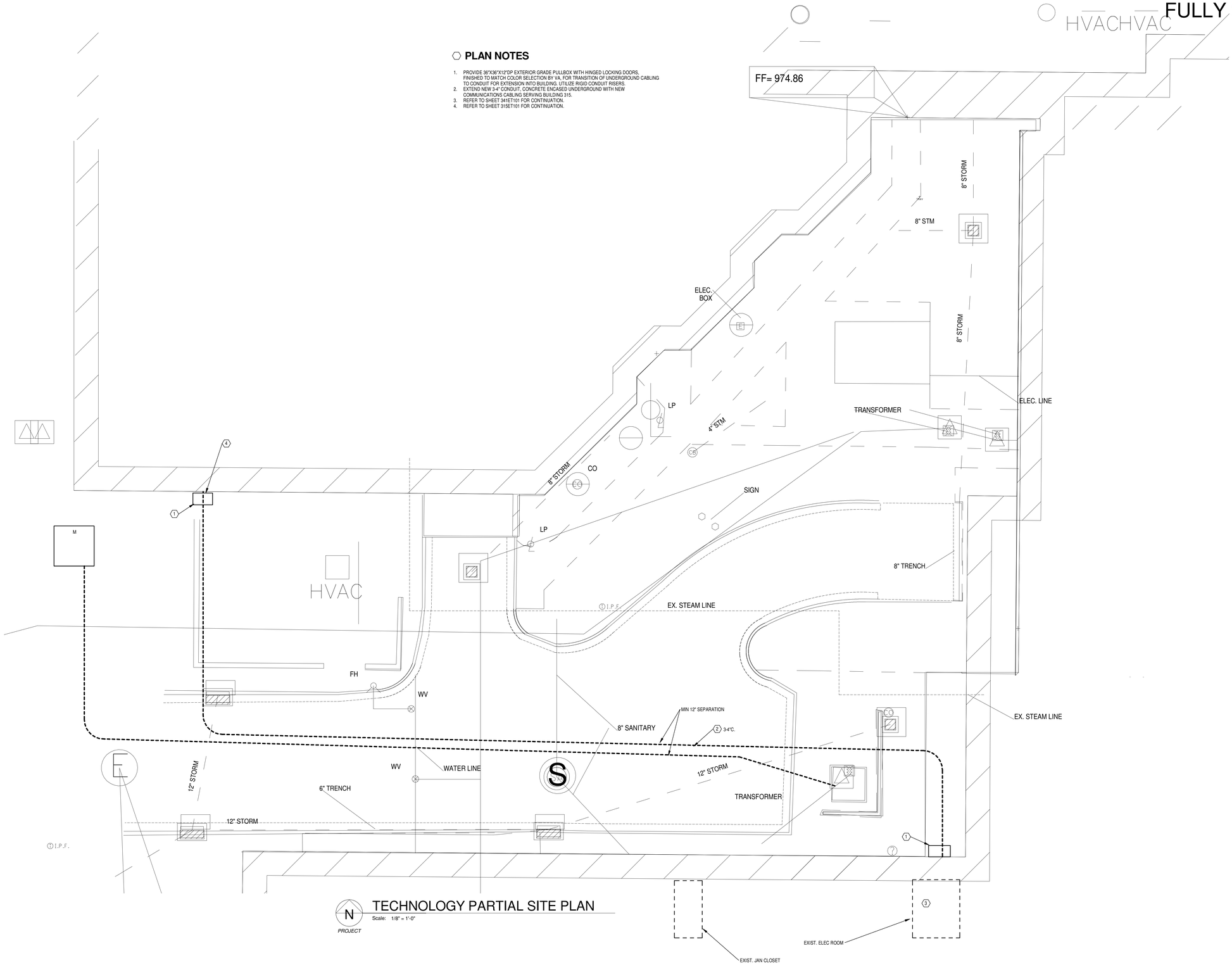
PLAN NOTES

1. PROVIDE 36"X36"X12"DP EXTERIOR GRADE PULLBOX WITH HINGED LOCKING DOORS, FINISHED TO MATCH COLOR SELECTION BY VA. FOR TRANSITION OF UNDERGROUND CABLING TO CONDUIT FOR EXTENSION INTO BUILDING. UTILIZE RIGID CONDUIT RISERS.
2. EXTEND NEW 3-4" CONDUIT, CONCRETE ENCASED UNDERGROUND WITH NEW COMMUNICATIONS CABLING SERVING BUILDING 315.
3. REFER TO SHEET 341ET101 FOR CONTINUATION.
4. REFER TO SHEET 315ET101 FOR CONTINUATION.



N
PROJECT

TECHNOLOGY PARTIAL SITE PLAN

Scale: 1/8" = 1'-0"

Revisions		Date
1	35% Schematic Design	03.05.2015
2	65% Design Development	04.28.2015
3	95% Owner Review	08.14.2015
4	100% Construction Documents	11.04.2015
5	Bid Set Drawings	01.15.2016

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Drawing Title: TECHNOLOGY PARTIAL SITE PLAN

Approved: Project Director

Project Title: RELOCATE PROSTHETICS AND PODIATRY CLINICS

Location: Dayton, Ohio

Date: 05.16.2016 | Checked: MSG | Drawn: JDK

Project No. VA Project No. 552-15-502 JPA Project No. 14006.00

Building Number: 999

Drawing Number: ES002

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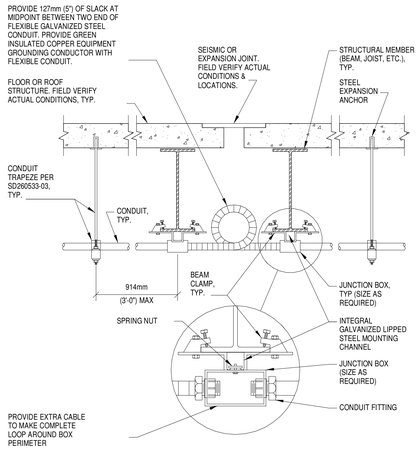
three inches = one foot
one and one-half inches = one foot
one inch = one foot
three-quarters inch = one foot
one-half inch = one foot
three-eighths inch = one foot
one-quarter inch = one foot
one-eighth inch = one foot

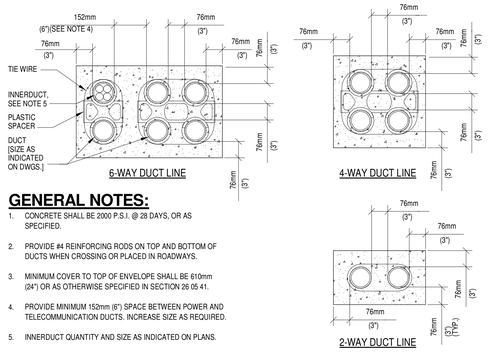


GENERAL NOTE:

1. DETAIL IS APPLICABLE ONLY FOR CONDUIT SMALLER THAN 76mm (3").

1 CONDUITEXPANSION JOINT CROSING DETAIL - FLEXIBLE CONDUIT

SCALE: 1/2" = 1'-0"

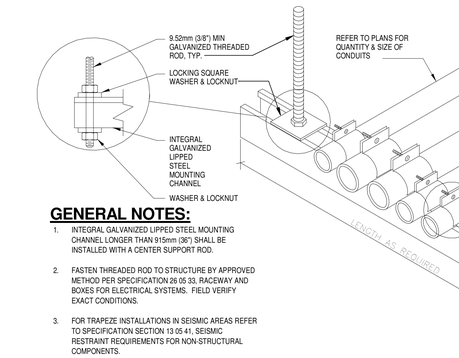


GENERAL NOTES:

1. CONCRETE SHALL BE 2000 P.S.I. @ 28 DAYS, OR AS SPECIFIED.
2. PROVIDE #4 REINFORCING RODS ON TOP AND BOTTOM OF DUCTS WHEN CROSSING OR PLACED IN ROADWAYS.
3. MINIMUM COVER TO TOP OF ENVELOPE SHALL BE 610mm (24") OR AS OTHERWISE SPECIFIED IN SECTION 26 05 41.
4. PROVIDE MINIMUM 152mm (6") SPACE BETWEEN POWER AND TELECOMMUNICATION DUCTS. INCREASE SIZE AS REQUIRED.
5. INNERDUCT QUANTITY AND SIZE AS INDICATED ON PLANS.

5 DUCT BANK DETAILS

SCALE: 1/2" = 1'-0"

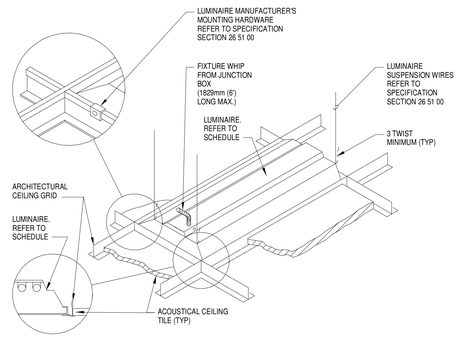


GENERAL NOTES:

1. INTEGRAL GALVANIZED LIPPED STEEL MOUNTING CHANNEL LONGER THAN 915mm (36") SHALL BE INSTALLED WITH A CENTER SUPPORT ROD.
2. FASTEN THREADED ROD TO STRUCTURE BY APPROVED METHOD PER SPECIFICATION 26 05 33, RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS. FIELD VERIFY EXACT CONDITIONS.
3. FOR TRAPEZE INSTALLATIONS IN SEISMIC AREAS REFER TO SPECIFICATION SECTION 13 05 41, SEISMIC RESTRAINT REQUIREMENTS FOR NON-STRUCTURAL COMPONENTS.

2 CONDUIT TRAPEZE MOUNTING DETAIL

SCALE: 1/2" = 1'-0"

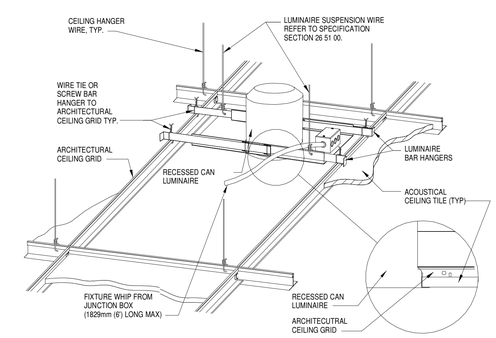


GENERAL NOTE:

1. INSTALL IN ACCORDANCE WITH MANUFACTURER'S MOUNTING INSTRUCTIONS AND USING THE RECOMMENDED MOUNTING HARDWARE.

8 LUMINAIRE MOUNTING - LAY-IN CEILING

SCALE: 1/2" = 1'-0"

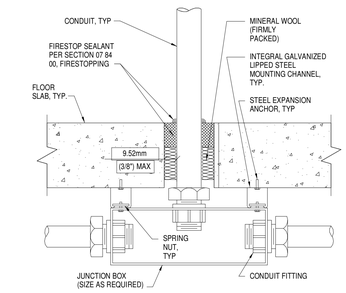


GENERAL NOTE:

1. INSTALL IN ACCORDANCE WITH MANUFACTURER'S MOUNTING INSTRUCTIONS AND USING RECOMMENDED MOUNTING HARDWARE

9 DOWNLIGHT MOUNTING - LAY-IN CEILING

SCALE: 1/2" = 1'-0"



3 FLOOR SLAB PENETRATION DETAIL

SCALE: 1/2" = 1'-0"

1	35% Schematic Design	03.05.2015
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Revisions		*Date*

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Drawing Title: DETAILS

Approved: Project Director

Project Title: RELOCATE PROSTHETICS AND PODIATRY CLINICS

Location: Dayton, Ohio

Date: 05.16.2016 | Checked: MSG | Drawn: SC

Project No. VA Project No. 552-15-502 JPA Project No. 14006.00

Building Number: 999

Drawing Number: E501

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Department of Veterans Affairs

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3 **SHELTER DISCONNECT**
SCALE: NONE

1 **BLD. 307 TRANSFORMER AND SWITCH**
SCALE: NONE

2 **SHELTER FEEDER**
SCALE: NONE

4 **BLD. 307 SWITCHBOARD**
SCALE: NONE

5 **T-36 TRANSFORMER**
SCALE: NONE

6 **EXISTING SHELTER**
SCALE: NONE

7 **SITE PHOTOGRAPH**
SCALE: NONE

1	35% Schematic Design	03.05.2015
2	65% Design Development	04.28.2015
3	95% Owner Review	08.14.2015
4	100% Construction Documents	11.04.2015
5	Bid Set Drawings	01.15.2016
Revisions		*Date*

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Drawing Title
SITE PHOTOGRAPH

Approved: Project Director

Project Title
RELOCATE PROSTHETICS AND PODIATRY CLINICS

Location
Dayton, Ohio

Date 05.16.2016 | Checked MSG | Drawn SC

Project No.
VA Project No. 552-15-502
JPA Project No. 14006.00

Building Number
999

Drawing Number
E502

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one-eighth inch = one foot | one-quarter inch = one foot | three-eighths inch = one foot | one-half inch = one foot | three-quarters inch = one foot | one inch = one foot | one and one-half inches = one foot | three inches = one foot

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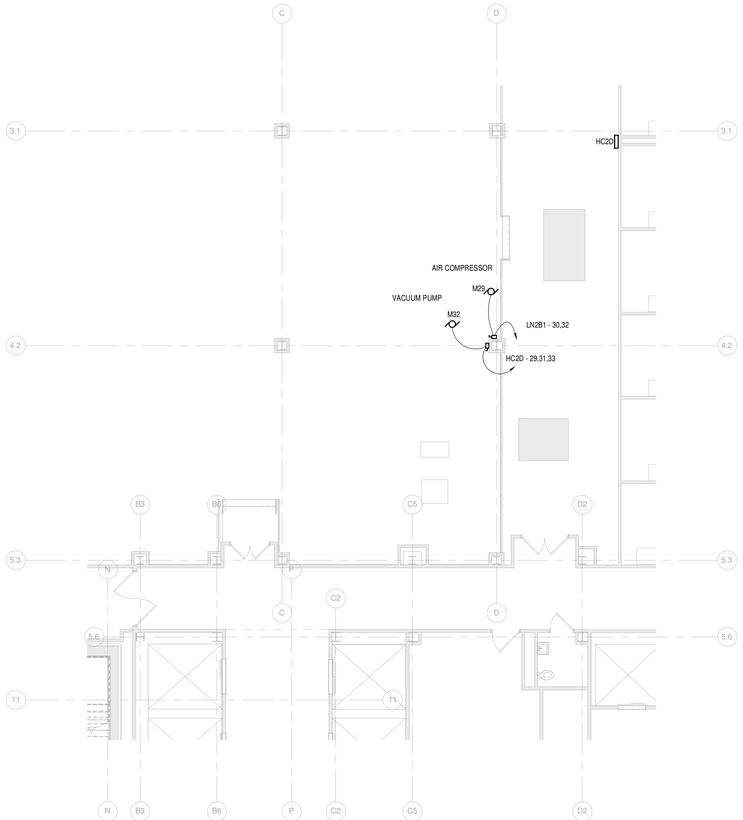
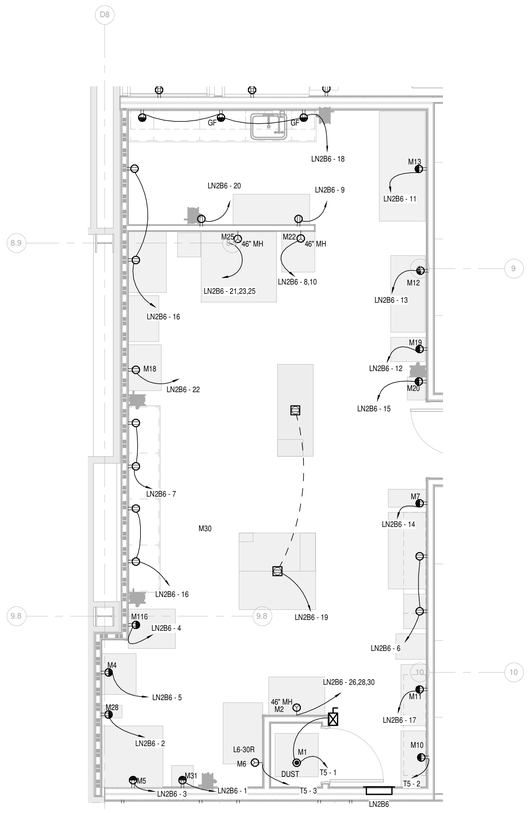


BLDG 330-02 MECHANICAL ROOM

Scale: 1/8" = 1'-0"

PROJECT



Bldg 330-02 ENLARGED FABRICATION ROOM

Scale: 1/4" = 1'-0"

PROJECT

MISC EQUIPMENT

NOTES:

MARK	DESCRIPTION	CHARACTERISTICS: HORSEPOWER (HP)	LOAD (kVA)	120V-1PH	208V-1PH	208V-3PH	240V-1PH	277V-1PH	480V-1PH	480V-3PH	DISC. MEANS: DISCONNECT SWITCH	RECEPTACLE	PANEL BREAKER	ELECTRICAL CONNECTION: DIRECT CONNECTION	CORD & PLUG	OUTLET M.H.	CORD & PLUG FURN. BY	FEEDER: NUMBER OF CONDUCTORS	WIRE SIZE	GROUND SIZE	CONDUIT SIZE	SEE NOTE
M1	DUST COLLECTOR	3	3.819			•					•			•				3	12	12	3/4	
M2	LATEDA SHOE		2.054			•						•			•			3	12	12	3/4	
M4	BELT SANDER		1.056	•								•			•	46"		2	12	12	3/4	
M5	TRAUTMANS CARVER		0.888	•								•			•	46"		2	12	12	3/4	
M6	TRAUTHMAN DISC SANDER	2	2.496		•							•			•	18"		2	10	10	3/4	
M7	DRILL PRESS		1.08	•								•			•	46"		2	12	12	3/4	
M10	SEWING MACH.		1.08	•								•			•	46"		2	12	12	3/4	
M11	SEWING PATCHER		1.56	•								•			•	46"		2	12	12	3/4	
M12	SAND BLASTER TRINCO		1.08	•								•			•	46"		2	12	12	3/4	
M13	OMEGA CARVER		1.08	•								•			•	46"		2	12	12	3/4	
M18	THE TABLE	1/4	0.696	•								•			•	18"		2	12	12	3/4	
M19	SHOE PRESS		1.08	•								•			•	46"		2	12	12	3/4	
M20	AUTO NAILER		0.24	•								•			•	46"		2	12	12	3/4	
M22	THERMOFORMER		3.12		•							•			•	46"		2	12	12	3/4	
M25	OVEN		5.044			•						•			•	46"		3	12	12	3/4	
M28	CHOP SAW		1.8	•								•			•	46"		2	12	12	3/4	
M29	AIR COMPRESSOR		1.872		•					•				•				2	12	12	3/4	
M30	VACUUM PUMP		1.08	•								•			•			2	12	12	3/4	
M31	DISC GRINDER		1.08	•								•			•	46"		2	12	12	3/4	
M32	VACUUM PUMP	7 1/2	9.145							•	•			•		46"		3	12	12	3/4	
M116	BAND SAW		1.92	•								•			•	46"		2	12	12	3/4	

Panel: HC2D

Location:
Supply From:
Voltage: 480/277 Wye-3PH-4W

Mounting: Surface
Enclosure: Type 1

A.I.C. Rating:
Mains Type: MLO
Mains Rating: 250 A

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	CWP-1	150 A	3	0 VA	0 VA					3	15 A	CWP-2	2
3	--	--	--			0 VA	0 VA			--	--	--	4
5	--	--	--					0 VA	0 VA	--	--	--	6
7	AWU-1	25 A	3	0 VA	0 VA					3	80 A	CH1	8
9	--	--	--			0 VA	0 VA			--	--	--	10
11	--	--	--					0 VA	0 VA	--	--	--	12
13	EF-1	15 A	3	0 VA	0 VA					3	15 A	EF-1	14
15	--	--	--			0 VA	0 VA			--	--	--	16
17	--	--	--					0 VA	0 VA	--	--	--	18
19	EF-3	15 A	3	0 VA	0 VA					2	20 A	Spare	20
21	--	--	--			0 VA	0 VA			--	--	--	22
23	--	--	--					0 VA	0 VA	1	20 A	Spare	24
25	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	26
27	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	28
29	VAC PUMP	20 A	3					3048...	0 VA	3	20 A	Spare	30
31	--	--	--	3048...	0 VA					--	--	--	32
33	--	--	--			3048...	0 VA			--	--	--	34
35	Spare	15 A	3					0 VA	0 VA	3	20 A	Spare	36
37	--	--	--	0 VA	0 VA					--	--	--	38
39	--	--	--			0 VA	0 VA			--	--	--	40
41	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	42
		Total Load:		3.05 kVA		3.05 kVA		3.05 kVA					

Notes:

TOTAL CONNECTED		ESTIMATED DEMAND
9.15 kVA		

Panel: LN2B6

Location:
Supply From: T5
Voltage: 120/208 Wye-3PH-4W

Mounting: Flush
Enclosure: Type 1

A.I.C. Rating: 10,000
Mains Type: MLO
Mains Rating: 225 A

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	M31	20 A	1	1080...	1800...					1	20 A	M28	2
3	M5	20 A	1			888 VA	1920...			1	20 A	M116	4
5	M4	20 A	1					1056...	360 VA	1	20 A	Receptacle	6
7	Receptacle	20 A	1	360 VA	1560...					2	20 A	M22	8
9	Receptacle	20 A	1			180 VA	1560...			--	--	--	10
11	M13	20 A	1					1080...	1080...	1	20 A	M19	12
13	M12	20 A	1	1080...	1080...					1	20 A	Receptacle	14
15	M20	20 A	1			240 VA	720 VA			1	20 A	Receptacle	16
17	M11	20 A	1					1560...	540 VA	1	20 A	Receptacle	18
19	Receptacle	20 A	1	360 VA	180 VA					1	20 A	Receptacle	20
21	M25	20 A	3			1681...	696 VA			1	20 A	M16	22
23	--	--	--					1681...					24
25	--	--	--	1681...	685 VA					3	20 A	M2	26
27	Spare	20 A	1			0 VA	685 VA			--	--	--	28
29	Spare	20 A	1					0 VA	685 VA	--	--	--	30
31	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	32
33	Spare	20 A	1			0 VA	0 VA			--	--	--	34
35	Space	--	--					0 VA	0 VA	--	--	Space	36
37	Space	--	--	0 VA	0 VA					--	--	Space	38
39	Space	--	--			0 VA	0 VA			--	--	Space	40
41	Space	--	--					0 VA	0 VA	--	--	Space	42
		Total Load:		9.87 kVA		8.57 kVA		8.04 kVA					

Notes:

TOTAL CONNECTED		ESTIMATED DEMAND
26.48 kVA		27.0 kVA (75A)

1	35% Schematic Design	03.05.2015
2	65% Design Development	04.28.2015
3	95% Owner Review	08.14.2015
4	100% Construction Documents	11.04.2015
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Revisions		*Date*

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Drawing Title: ENLARGED PLANS

Approved: Project Director

Project Title: RELOCATE PROSTHETICS AND PODIATRY CLINICS

Location: Dayton, Ohio

Date: 05.16.2016 | Checked: MSG | Drawn: SC

Project No.
VA Project No. 552-15-502
JPA Project No. 14006.00

Building Number: 999

Drawing Number: E503

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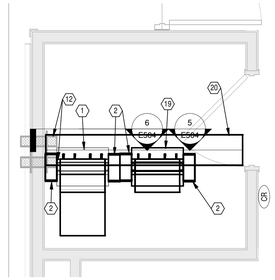
Office of Construction and Facilities Management
Department of Veterans Affairs

FULLY SPRINKLERED

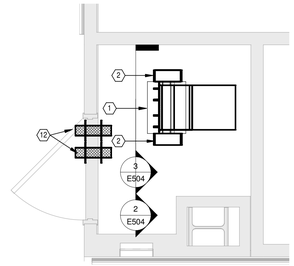


N

EXISTING SIGNALS CLOSET 114

Scale: 1/2" = 1'-0"

PROJECT



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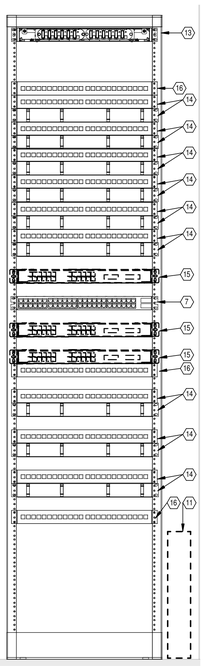
EXISTING SIGNALS CLOSET 2D-122

Scale: 1/2" = 1'-0"

PROJECT

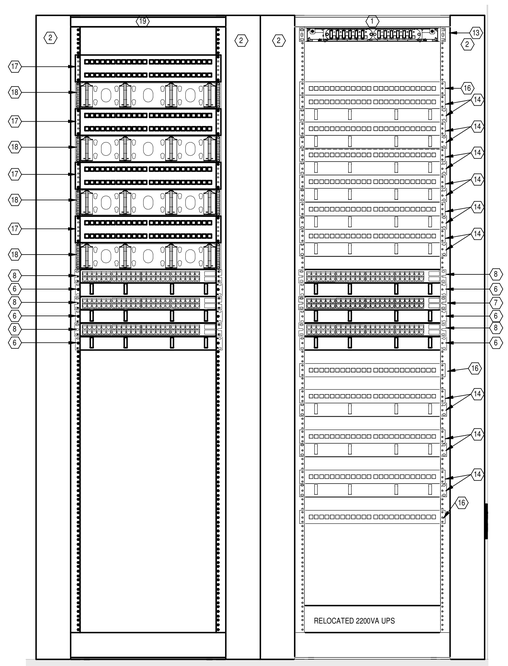
PLAN NOTES

1. EXISTING RELAY RACK TO BE RE-USED. RACK MAY BE REQUIRED TO BE UNBOLTED FROM FLOOR, SHIFTED IN LOCATION AND RE-ANCHORED TO SUPPORT NEW VERTICAL CABLE MANAGERS ON EACH SIDE.
2. PROVIDE NEW FULL HEIGHT, VERTICAL CABLE MANAGER PANELS.
3. EXISTING PATCH PANELS TO BE REMOVED/REPLACED. DROPS SERVING AREA OF DEMOLITION TO BE REMOVED BACK TO OUTLETS BEING DEMOLISHED. DROPS SERVING AREAS NOT UNDER CONSTRUCTION TO BE IDENTIFIED, TESTED AND RECORDED, REMOVED FROM PATCH PANEL, TAGGED AND RE-TERMINATED IN NEW PATCH PANELS AND RE-TESTED TO CERTIFY OUTLETS ARE IN COMPLIANCE WITH CATEGORY RATINGS. APPROXIMATELY 120 DROPS ARE BEING REMOVED IN THE AREA OF DEMOLITION. APPROXIMATELY 280 DROPS ARE REMAINING THAT WILL REQUIRE RE-TERMINATION. FINAL COUNT IS TO BE VERIFIED BY THE CONTRACTOR PRIOR TO CABLING DEMOLITION WORK.
4. EXISTING PATCH PANEL SERVING WIRELESS ACCESS POINTS TO BE MAINTAINED AND RE-INSTALLED IN EXISTING RACK UTILIZING PROPER MOUNTING HARDWARE.
5. NEW 48 PORT, HIGH DENSITY PATCH PANEL. PROVIDE BLUE/YELLOW PANELS AS REQUIRED BY SEPARATION OF BLUE/YELLOW DATA CABLING. PANELS TO BE UTILIZED FOR NEW DASTA DROPS IN THE AREA OF RENOVATION AND RE-TERMINATION OF EXISTING DATA DROPS OUTSIDE THE AREA OF RENOVATION.
6. NEW 1RU HORIZONTAL WIRE MANAGEMENT PANEL.
7. EXISTING NETWORK SWITCH TO BE RELOCATED TO NEW RACK POSITION AND RE-INSTALLED.
8. NEW 48 PORT POE+ NETWORK SWITCH. REFER TO SPECIFICAIONS.
9. NEW RACK MOUNTED, LINE INTERACTIVE, 2000VA, 120V-20A UPS WITH NETWORK AND ENVIRONMENTAL MONITORING ACCESSORIES.
10. EXISTING ROUTEER TO BE RELOCATED TO NEW RACK POSITION BY VA.
11. EXISTING UPS TO BE REMOVED AND TURNED OVER TO THE VA.
12. PROVIDE NEW RE-ENTERABLE, FIRE RATED CABLE SLEEVE ASSEMBLY, 4" CONDUIT CAPACITY EQUIVALENT ABOVE CEILING FOR NEW CABLING.
13. EXISTING FIBER TERMINATION PANEL TO BE MAINTAINED.
14. EXISTING PATCH PANEL WITH INTEGRAL CABLE MANAGER TO BE MAINTAINED WITHIN RACK. REMOVE CABLE DROPS SERVING OUTLETS BEING DEMOLISHED AND RE-LABEL PORTS SPARE.
15. EXISTING NETWORK SWITCH TO BE REMOVED AND TURNED OVER TO VA.
16. EXISTING PATCH PANEL TO BE MAINTAINED WITHIN RACK. REMOVE CABLE DROPS SERVING OUTLETS BEING DEMOLISHED AND RE-LABEL PORTS SPARE.
17. NEW 48 PORT, 2RU PATCH PANEL FOR NEW DATA STATION CABLING. PROVIDE BLUE/YELLOW PANELS AS REQUIRED BY SEPARATION OF BLUE/YELLOW DATA CABLING.
18. NEW 2RU HORIZONTAL CABLE MANAGER.
19. NEW 2-POST, FULL HEIGHT RELAY RACK.
20. NEW 12"WX4"DP WIRE BASKET TRAY RUN ABOVE RACKS. PROVIDE DROP OUTS INTO RACKS FOR CABLING. SECURE CABLE TRAY TO OVERHEAD RACKS. MOUNT AT 78" AFF.



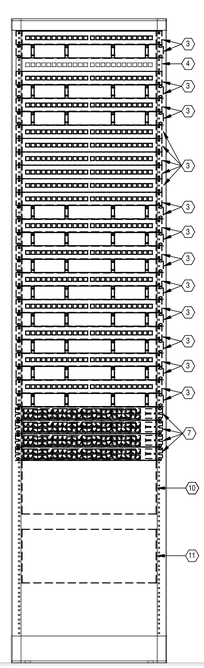
5 EXISTING RACK 114-DEMO

SCALE: 1 1/2" = 1'-0"



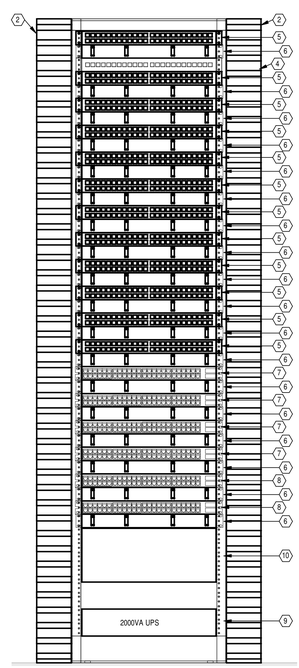
6 EXISTING RACK 114-NEW WORK

SCALE: 1 1/2" = 1'-0"



2 EXIST RACK 2D-122-DEMO

SCALE: 1 1/2" = 1'-0"



3 EXIST. RACK 2D-122-NEW WORK

SCALE: 1 1/2" = 1'-0"

1	35% Schematic Design	03.05.2015
2	65% Design Development	04.28.2015
3	95% Owner Review	08.14.2015
4	100% Construction Documents	11.04.2015
5	Bid Set Drawings	01.15.2016
Revisions		*Date*

CONSULTANTS:

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Heapy Project No.: 2014-04034 Firm License No.: 01528

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one-eighth inch = one foot | one-quarter inch = one foot | three-eighths inch = one foot | one-half inch = one foot | three-quarters inch = one foot | one inch = one foot | one and one-half inches = one foot | three inches = one foot